

# NAVAL POSTGRADUATE SCHOOL

**MONTEREY, CALIFORNIA** 

## **THESIS**

VALIDATING A MODEL OF TEAM COLLABORATION AT THE NORTH AMERICAN AEROSPACE DEFENSE COMMAND USING SELECTED TRANSCRIPTS FROM SEPTEMBER 11, 2001

by

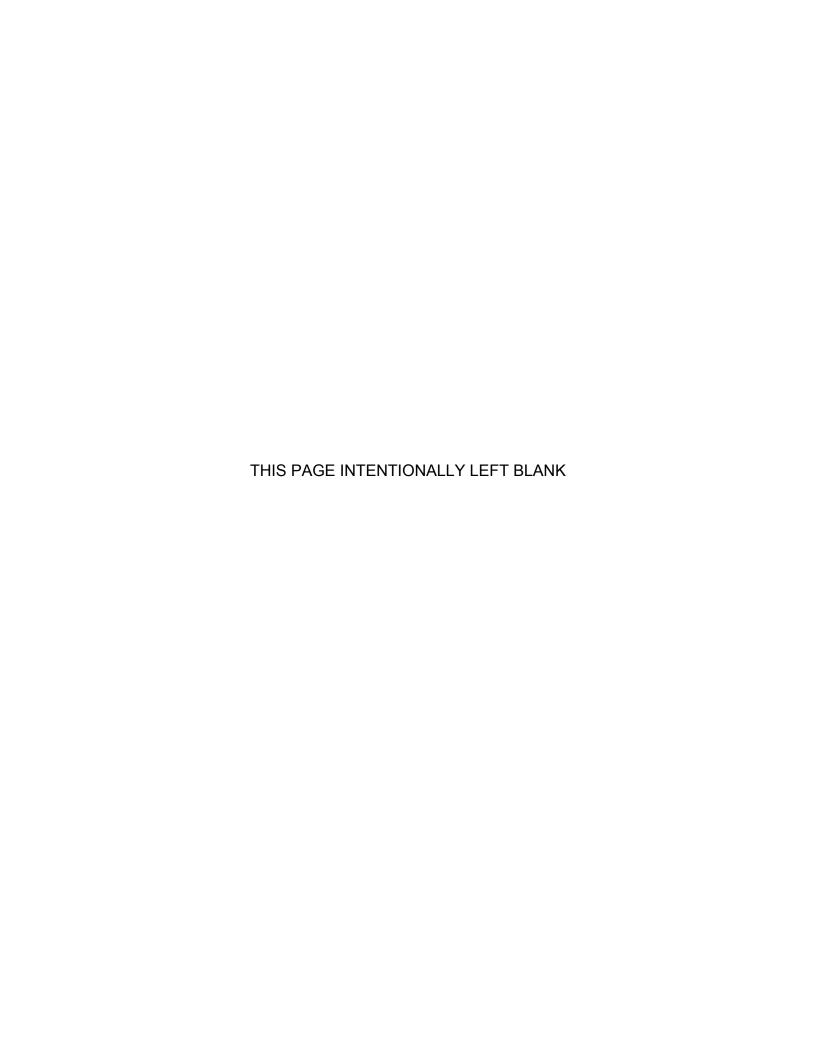
Catherine Donaldson David Johnson

June 2008

Thesis Co-Advisors:

Susan G. Hutchins Anthony Kendall

Approved for public release; distribution is unlimited



#### REPORT DOCUMENTATION PAGE Form Approved OMB No. 0704-0188 Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington DC 20503. 1. AGENCY USE ONLY (Leave blank) 2. REPORT DATE 3. REPORT TYPE AND DATES COVERED June 2008 Master's Thesis 4. TITLE AND SUBTITLE Validating a Model of Team Collaboration at the 5. FUNDING NUMBERS North American Aerospace Defense Command Using Selected Transcripts from September 11, 2001 6. AUTHOR(S) Catherine Donaldson and David Johnson 7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) 8. PERFORMING ORGANIZATION Naval Postgraduate School REPORT NUMBER Monterey, CA 93943-5000 9. SPONSORING /MONITORING AGENCY NAME(S) AND ADDRESS(ES) 10. SPONSORING/MONITORING AGENCY REPORT NUMBER 11. SUPPLEMENTARY NOTES The views expressed in this thesis are those of the author and do not reflect the official policy or position of the Department of Defense or the U.S. Government. 12a. DISTRIBUTION / AVAILABILITY STATEMENT 12b. DISTRIBUTION CODE Approved for public release; distribution is unlimited 13. ABSTRACT (maximum 200 words) On September 11, 2001, during an exercise at the North American Aerospace Defense Command

On September 11, 2001, during an exercise at the North American Aerospace Defense Command (NORAD), air traffic controllers in New York, Boston, Washington and Cleveland discovered that four American commercial airliners had been hijacked. Initially, the officials at NORAD's North East Air Defense Sector (NEADS) were confused as to whether the hijackings were real world or part of an exercise. The goal of this thesis is to investigate the teamwork and collaboration that occurred between NEADS, their counterparts at the Federal Aviation Administration (FAA) and various air traffic control centers in order to provide military air support and ground civilian air traffic over the United States. Transcripts of recorded audio from the command and control center at NEADS were coded and analyzed in an effort to use a real world example to empirically validate the structural model of team collaboration, developed by the Office of Naval Research. The model focuses on individual and team cognitive processes used during collaboration with the goal of understanding how individuals and teams work together under stress to make decisions.

<b>14. SUBJECT TERMS</b> Team C September 11, 2001, Cognition	15. NUMBER OF PAGES 203		
	16. PRICE CODE		
17. SECURITY CLASSIFICATION OF REPORT  18. SECURITY CLASSIFICATION OF THIS PAGE		19. SECURITY CLASSIFICATION OF ABSTRACT	20. LIMITATION OF ABSTRACT
Unclassified	Unclassified	Unclassified	UU

NSN 7540-01-280-5500

Standard Form 298 (Rev. 8-98) Prescribed by ANSI Std. Z39.18

#### Approved for public release; distribution is unlimited

# VALIDATING A MODEL OF TEAM COLLABORATION AT THE NORTH AMERICAN AEROSPACE DEFENSE COMMAND USING SELECTED TRANSCRIPTS FROM SEPTEMBER 11, 2001

Catherine W. Donaldson Lieutenant Commander, United States Navy B.S., United States Naval Academy, 1994

and

David A. Johnson Lieutenant, United States Navy B.S., Salisbury State University, 1996 M.A., Salisbury State University, 1999

Submitted in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE IN SYSTEMS TECHNOLOGY (COMAND, CONTROL, AND COMMUNICATION (C3))

from the

# NAVAL POSTGRADUATE SCHOOL June 2008

Authors: Catherine Donaldson

David Johnson

Approved by: Susan G. Hutchins

Thesis Co-Advisor

Anthony Kendall Thesis Co-Advisor

Daniel Boger, PhD.

Chairman, Department of Information Science

#### **ABSTRACT**

On September 11, 2001, during an exercise at the North American Aerospace Defense Command (NORAD), air traffic controllers in New York, Boston, Washington, and Cleveland discovered that four American commercial airliners had been hijacked. Initially, the officials at NORAD's North East Air Defense Sector (NEADS) were confused as to whether the hijackings were real world or part of an exercise. The goal of this thesis is to investigate the teamwork and collaboration that occurred between NEADS, their counterparts at the Federal Aviation Administration (FAA) and various air traffic control centers in order to provide military air support and ground civilian air traffic over the United States. Transcripts of recorded audio from the command and control center at NEADS were coded and analyzed in an effort to use a real world example to empirically validate the structural model of team collaboration, developed by the Office of Naval Research. The model focuses on individual and team cognitive processes used during collaboration with the goal of understanding how individuals and teams work together under stress to make decisions.

## **TABLE OF CONTENTS**

I.	INT	RODUCTION AND BACKGROUND	1
	A.	SEPTEMBER 11, 2001	1
		1. Timeline	1
		2. Response	3
		3. NORAD	4
	В.	THESIS GOALS	5
	C.	PREVIOUS RESEARCH	6
II.	LITE	RATURE REVIEW	9
	Α.	INDIVIDUAL PERFORMANCE AND DECISION MAKING	9
	В.	COGNITION	
		1. Metacognition	
		2. Macrocognition and Microcognition	
	C.	TEAMWORK AND TEAM PERFOMANCE	
		1. Team Communication	. 14
		2. High Performing Teams	
		3. Virtual Teams	
	D.	DECISION MAKING AND DECISION MAKING STYLES	16
		1. The Rational or Classical Model	
		2. The Administrative (or Behavioral) Model	
		3. The Implicit Favorite Model	
		4. The Political Model	. 18
III.	STR	UCTURAL MODEL OF TEAM COLLABORATION	. 19
	Α.	PREVIOUS MODEL AND COMPONENTS	
		1. Input	
		2. Team Knowledge Base Construction	21
		3. Collaborative Team Problem Solving	
		4. Team Consensus	
		5. Outcome Evaluation and Revision	. 22
		6. Output	. 22
	В.	THE UPDATED MODEL	
		1. Input	
		2. Phases of Cognition within the Model	
		3. Output	. 29
IV.	MET	THODS	. 31
	Α.	AUDIO CHANNEL SELECTION	
	В.	TRANSCRIPTION	. 31
	C.	PRACTICE CODING	
	D.	REMOVING COGNITIVE PROCESS CODES AND CHANGING	
		DEFINITIONS	
	E.	THE FINAL CODING PROCESS	35
	F	AUDIO ANALYSIS SOFTWARE	36

V.	RESU	ILTS								39
	A.	CODII								
		1.	Addit	ional Co	des and	Code De	efinition In	terpretati	on	39
		2.								
		3.								
		4.					NC Exclu			
	В.						SIS			
	C.									
		1.					ntal Model			
		2.					NEADS			
		3.	The	Third	Time	Dhaca	NEADS	Montal	Model	54
		J.	Deve	lonment	Tillie	i iiase	NLADO	MEHILAI	WIOGEI	54
		4.	The	Fourth	Time	Phase	NEADS	Mental	Model	04
		••								
	D.	CHI-S	QUAR	RE ANAL	YSIS					56
	E.	ADHE	RENC	E TO SC	P					60
	F.	CONC	LUSIC	ON						60
		1.	Use o	of the Co	des					61
		2.	Chi-S	quare R	esults					61
VI.	RECO	MMEN	IDATI	ONS FOR	R FUTUE	RE RESE	ARCH			63
• • •	A.						NNELS			
	B.						RE			
A DDE	MDIV	۸.		ADLES O		OCOCN	ITIVE PRO	CESSES	IN THE	
AFFL							LABORAT			
										03
APPE	NDIX I						E OCCUI			74
	PERC	ENIA	GES V	VIIH IVIIS	CAND	NC		•••••		/1
APPE	NDIX (				DATA US	SED TO	CALCULA	TE CHI S	QUARE	
	VALU	ES	73							
APPE	NDIX I	D:	NOR	AD TRAN	ISCRIPT	S FROM	CHANNE	L <b>2</b>		79
LIST	OF RE	FEREN	ICES						1	81
INITI	n Dis.	TRIBU	TION I	IST					1	87

## **LIST OF FIGURES**

Figure 1.	Determinants of Work Performance From (Blumberg, and Pringle, 1982)	10
Figure 2.	Macrocognitive functions and supporting processes for individuals, teams, and information technologies (Klein et al., 2003)	
Figure 3.	Framework linking team structure to communication efficiency: dotted lines indicate links not yet supported by data, TLX = Task	
	Load Index. From (Salas and Fiore, 2004)	15
Figure 4.	Model of Team Collaboration. (Warner et al., 2003)	

## **LIST OF TABLES**

Table 1.	Important Macrocognitive Phenomena and Traditional
	Microcognitive Lab Research From (Klein, G., Ross, K. G., Moon,
	B. M., Klein, D. E., and Hollnagel, E., 2003)
Table 2.	Examples of Difference in Interpretation of Definitions Between
	Coders for SUK and KT43
Table 3.	Communication Turns Coded as Representing Critical Thinking 44
Table 4.	Communication Turns Coded as Mental Simulation45
Table 5.	Communication Turns Coded as Solution Option Generation 47
Table 6.	Examples of communication turns coded as replanning 48
Table 7.	Examples of communication turns coded as feedback
	interpretation 48
Table 8.	Communication turns coded with PRTA50
Table 9.	Frequency and Percentage of Cognitive Processes Used Excluding
	the Codes Miscellaneous and Not Codeable51
Table 10.	Example of Confusion 55
Table 11.	Summary of Chi-Square Analysis for all Twenty-six Cognitive
	Process Categories between Different Time Phases 58
Table 12.	Summary of Chi Square Analysis for Cognitive Categories 1-3 and
	4-6 Between Time Phase 1-2 and 3-459
Table 13.	MCC Taking Things Into His Own Hands60
Table 14.	Macroognitive Process Codes: Examples From Channel 2
	Transcript65
Table 15.	Observed Values For Chi Square Data Sub-Set 173
Table 16.	Observed Values For Chi Square Data Sub-Set 2 for Time Phase 1
	vs. 2-4
Table 17.	Observed Values For Chi Square Data Sub-Set 2 for Time Phase 2
	vs. 1 and 3-475
Table 18.	Observed Values For Chi Square Data Sub-Set 2 for Time Phase 3
	vs. 1-2 and 4
Table 19.	Observed Values For Chi Square Data Sub-Set 2 for Time Phase 4
	vs. 1-377
Table 20.	Observed Values For Chi Square Data Sub-Set 3 for
	Macrocognitive Categories 1-3 and 4-6 vs. Time Phase 1-2 and 3-4.77
Table 21.	Complete Channel 2 Transcript with Final Cognitive Process Codes. 79

#### **ACKNOWLEDGMENTS**

We would like to thank Susan Hutchins and Tony Kendall for all of their guidance, mentorship and support throughout this thesis process. Without their patience and expertise, this would never have come to fruition. To Lynn Johnson and Baby David Johnson, thank you for being so patient through the late nights and crazy schedules. Your love, support and dedication to helping this project get finished, is deeply appreciated. Hailey Donaldson, clean your room, hang up your towel and brush your teeth. Seriously, thank you for being understanding while we were working on this thesis. We appreciate your sense of humor even when it was not fun.

#### I. INTRODUCTION AND BACKGROUND

#### A. SEPTEMBER 11, 2001

#### 1. Timeline

The following timeline is meant to be an approximation of the events that occurred on September 11, 2001, but is by no means an official timeline. The basic timeline was pulled from Wikipedia with some minor modifications (The National Commission on Terrorist Attacks Upon the United States, 2004).

- 7:59 A.M. American Airlines Flight 11, a Boeing 767 with 92 people on board, departs Boston's Logan International Airport bound for Los Angeles International Airport.
- 8:14 A.M. United Airlines Flight 175, a Boeing 767 with 65 people on board, departs from Boston's Logan International Airport bound for Los Angeles International Airport.
- 8:20 A.M. American Airlines Flight 77, a Boeing 757 with 64 people on board, departs Washington Dulles International Airport bound for Los Angeles International Airport.
- 8:40 A.M. The FAA notifies NORAD's Northeast Air Defense Sector of the suspected hijacking of American Airlines Flight 11.
- 8:42 A.M. United Airlines Flight 93, a Boeing 757 with 44 people on board, departs from Newark International Airport bound for San Francisco International Airport.
- 8:43 A.M. The FAA notifies NORAD's Northeast Air Defense Sector of the suspected hijacking of United Airlines Flight 175.
- 8:45 A.M. American Airlines Flight 11 crashes into the North World Trade Center tower (1 Tower).
- 8:46 A.M. Jet fighters are scrambled from Otis Air National Guard Base in Fallmouth, Massachusetts.
- 9:03 A.M. United Airlines Flight 175 crashes into the South World Trade Center tower (2 Tower).
- 9:08 A.M. The FAA bans all takeoffs of flights going to or through New York airspace.

- 9:17 A.M. The FAA shuts down all New York City-area airports.
- 9:21 A.M. All bridges and tunnels into Manhattan are closed.
- 9:24 A.M. The FAA notifies NORAD's Northeast Air Defense Sector of the suspected hijacking of American Airlines Flight 77.
- 9:25 A.M. The FAA orders shutdown of all airports nationwide, banning takeoffs of all civilian aircraft.
- 9:31 A.M. President George W. Bush makes a statement from Emma Booker Elementary School in Sarasota, Florida, calling the crashes an "apparent terrorist attack."
- 9:35 A.M. NORAD scrambles two F-16 fighters from Langley Air Force Base, Virginia.
- 9:40 A.M. American Airlines Flight 77 crashes into the west side of the Pentagon.
- 9:45 A.M. An operator receives a cell phone call from a passenger on United Airlines Flight 93, who reports that the flight has been hijacked and that the passengers are going to fight back.
- 9:45 A.M. The FAA orders all airborne aircraft, over 4500, to land at nearest airport.
- 9:48 A.M. The White House's West Wing and the U.S. Capitol are evacuated.
- 9:55 A.M. Scrambled jet fighters reach Washington, D.C. area.
- 9:57 A.M. President George W. Bush leaves Sarasota, Florida.
- 10:05 A.M. The south World Trade Center tower (2 Tower) collapses.
- 10:07 A.M. United Airlines Flight 93 crashes near Shanksville, Pennsylvania.
- 10:10 A.M. A walled section of The Pentagon collapses.
- 10:29 A.M. The north World Trade Center tower (1 Tower) collapses.
- 10:50 A.M. New York's primary elections are postponed.
- 10:56 A.M. Palestinian leader Yasser Arafat makes a statement offering condolences.

- 11:00 A.M. New York Mayor Rudy Guiliani orders the evacuation of lower Manhattan south of Canal Street.
- 11:04 A.M. The United Nations is completely evacuated.
- 11:44 A.M. President George W. Bush lands at Barksdale Air Force Base.
- 12:04 P.M. Los Angeles International Airport, destination of three of the hijacked airplanes, is closed and evacuated.
- 12:15 P.M. San Francisco International Airport, destination of United Airlines Flight 93, is closed and evacuated.
- 12:30 P.M. The FAA reports that only 50 flights remain airborne.

#### 2. Response

On September 11, 2001, the staff stationed at the Northeast Air Defense Sector (NEADS), the regional headquarters for the North American Aerospace Defense Command (NORAD), jumped into action and coordinated the country's military response to four hijacked airliners. The NEADS crew, led by the mission crew commander (MCC), eventually scrambled four armed fighters, two from the Otis Air National Guard Base in Falmouth, Massachusetts, and two from Langley Air Force Base in Virginia in an attempt to find and trail the hijacked aircraft. Standard protocol during an aircraft hijacking is to launch fighter aircraft from the appropriate base and have them trail the aircraft in a position that allows for an appropriate response depending on the situation (Bronner, 2006).

Throughout the day, NEADS coordinated with Boston Center, New York, Chicago, Otis Air National Guard Base, Langley Air Force Base, and the FAA in order to determine how many hijackings had taken place, where they were headed and what their intent was. In the end all civilian air traffic was grounded by the FAA and all four hijacked aircraft were intentionally destroyed by the hijackers.

All communications by the NEADS crew were recorded on multi-channel tape recorders as standard protocol. This thesis includes an analysis of one of those channels, in an effort to analyze the team collaboration that occurred that day.

#### NORAD

The North American Aerospace Defense Command (NORAD) is a binational United States and Canadian Organization charged with the protection of North American airspace. The organization employs a network of space-based, aerial-and ground-based sensors, refueling capabilities and fighter aircraft to detect and deter threats from both international and local enemies. The critical missions that NORAD performs include: aerospace warnings of manmade objects in space such as missiles and space vehicles, detection, validation and warning of attacks against North America by aircraft, missiles and space vehicles, achieved by mutual agreements with other commands (North American Aerospace Defense Command, About NORAD).

The idea for NORAD and its mission began in 1940 when President Roosevelt and Canadian Prime Minister King issued the "Ogdensburg Declaration." It defined the concept of United States and Canada joint defense. In 1947, the United States and Canadian governments issued a "Joint Statement on Defense Collaboration" emphasizing the continuing importance of cooperative defense planning between the two countries. In 1954, President Eisenhower approved the National Security Council recommendation to create a distant early warning system for the defense of the U.S. Later in 1954, the Continental Air Defense Command, a predecessor to NORAD, was established to implement the early warning system. Finally, in September of 1957, following the Soviet Union's first launch of a multistage ballistic missile, NORAD was established. NORAD was initially created to deal with the threats presented by the Cold War. Although the Cold War has long since ended the need to protect North American

air space continues. NORAD continues to adjust its structure to support the dynamic changes of the world (Federation of American Scientists, NORAD Selected Chronology).

NORAD is divided into three distinct regions: Continental NORAD region (CONR), Canadian NORAD region (CANR), and Alaskan NORAD region (ANR). These three regions are further divided into sectors. Of particular interest to this thesis is the Northeast Air Defense Sector (NEADS). NEADS is the regional headquarters for NORAD located at Griffiss Air Force Base in Rome New York. It is responsible for protecting a half of a million square miles of American airspace from the East Coast including Canada to the Midwest areas such as Tennessee, the Dakotas and Chicago (Bronner, 2006). NEADS was the key command and control center for the U.S. military response during the attacks of September 11, 2001.

NEADS is operated by the Air National Guard (ANG) and reports to the CONR headquarters, in Panama City, Florida, which in turn reports to NORAD headquarters, in Colorado Springs, Colorado. NEADS's Sister-Sector, the Western Air Defense Sector (WADS), operates out of McChord Air Force Base in Washington and also reports to CONR. The Southeast Air Defense Sector, another sector of NORAD, was operational during the events of September 11, 2001, and participated in the initial response, however SEADS has since been disestablished and their mission has been shifted to NEADS and WADS (Strickler, 2006).

#### B. THESIS GOALS

The primary goal for this thesis is to empirically validate the Office of Naval Research (ONR) developed model of team collaboration. As part of this validation, we used the macrocognitive process definitions and the associated codes provided by ONR in order to ensure that they are adequate for analysis of real world events. We also provide recommendations for improvements and additions to the current set of codes.

Channel two mission control commander (MCC) operations, (channel 2), was the primary communications channel used by the MCC during the crisis. The audio from this channel was transcribed by a professional transcriber and provides an excellent example of a collaborative team effort as they responded to a real-world crisis. Coding these communications transactions will help determine if the meta-cognitive and macro-cognitive processes included in the model accurately represent how problems are solved in a real world crisis, or if the model is best suited for laboratory and controlled environments. Prior to coding the transcripts it was determined that certain codes would not used because they were designed specifically for use in a controlled laboratory environment. This does, however, not imply that these codes should be removed from the model. Additional codes were also added to support the unique situation and environment in which the military operates.

#### C. PREVIOUS RESEARCH

Other research has been conducted in an attempt to validate the structural model of team collaboration and is briefly described below. This research includes a thesis by Ensign Maura Garrity 2007, a thesis by Lieutenant Luis Socias 2008, and several studies by Hutchins and Kendal from a series of field experiments and a series of laboratory experiments where teams engaged in air warfare scenarios as well as Maritime Interdiction Operations (Garrity, 2007), (Socias, 2008), (Hutchins and Kendall, 2008).

Ensign Garrity's thesis analyzed the response of the Fire Department of New York during the events of September 11, 2001 (Garrity, 2007). She used the structural model of team collaboration to help the Fire Department of New York City understand how it worked as a team and offered improvements for both the FDNY and how to improve the model.

Hutchins and Kendall analyzed transcripts from a series of Maritime Interdiction Operations experiments and team communications from air warfare teams on an Aegis ship (Hutchins and Kendall 2008). A MIO is the boarding of a

suspicious ship to ensure embargos are being enforced and no illegal products are entering or leaving ports of interests. The most common MIO operations take place in the vicinity of Iraq but are not limited to this location. The airwarfare scenario involved the deconfliction of hostile and friendly air contacts in the combat information center (CIC) aboard USS Princeton (CG 59) and USS Curtis Wilbur (DDG 54). Team communications were analyzed to see how teams collaborated in complex, one of a kind situations encountered in both MIO and air warfare scenarios (Hutchins, Kendall, and Bordetsky, 2008).

Lieutenant Luis Socias' thesis analyzed a second audio channel from the NEADS response to 9/11 (Socias, 2008). His research is also an effort to validate the structural model of team collaboration. Although his research stands alone it could eventually be paired with this thesis and future analysis of all of the audio channels in order to gain a more accurate picture of the total inter-agency team collaboration that occurred on September 11 between the military and civilian responders.

#### II. LITERATURE REVIEW

#### A. INDIVIDUAL PERFORMANCE AND DECISION MAKING

In almost any task some people will perform better than others even when the amount of practice is controlled. Although training and Intelligence Quotient (IQ) are major factors in the quality of individual performance, they are not the only ones. Performance on a variety of tasks declines with age especially after the age of 60 (Mathews, Davies, and Westerman, 2000). Gender also plays a significant role in individual performance. Although there is little difference in overall intelligence test scores, males typically score higher on visual and spatial tests whereas females score better on verbal skills. Sex hormones are related to some of these differences but social factors play a role as well.

Individual performance cannot be measured by ability alone. An intelligent and talented individual may perform poorly due to lack of motivation, distraction, or by temporary mood states such as fatigue or emotional stress. Things like the lighting of the workspace, the comfort of the desk, ambient lighting and noise are all factors for individual performance. Figure 1 illustrates Blumberg and Pringle's (1982) theory of work performance which addresses all of these concerns. The first factor of this diagram is capacity which includes intelligence, learned skills and physical fitness. The second factor is willingness, which refers to motivation and attitude. The third factor, opportunity, refers to the physical and social environment provided by the organization. Performance reflects the interaction of these three factors. In this model, team performance is directly related to the performance of the individuals on the team (Blumberg and Pringle, 1982).

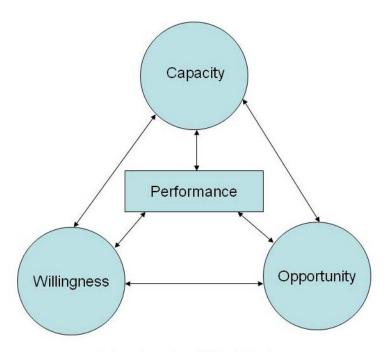


Figure 1. Determinants of Work Performance From (Blumberg, and Pringle, 1982)

#### B. COGNITION

The term cognition is used in different ways by different disciplines. In psychology, it refers to an information processing view of an individual's psychological functions. Other interpretations of the meaning of cognition link it to the development of concepts; individual minds, groups, organizations, and even larger coalitions of entities. These groups can be modeled and studied to understand how humans think. There are many levels of cognition which include metacognition, microcognition and macrocognition (Merriam-Webster, Cognition).

#### 1. Metacognition

Metacognition defines how people think and how they process tasks. Metacognition has implications for groups and teams on a variety of cognitive tasks they perform. Metacognition emerged as an important topic for teams in the early 1990s. Flight crew thought processes, jury decision making and decisions under stressful environments were the first topics of study. After the

tragic events of September 11, 2001, the study of metacognition within groups and teams bloomed with real-world studies of how humans react and perform under enormous amounts of stress.

One area of research within metacognition is metamemory. Metamemory is what people know about what they remember. Memory in group performance is essential for high team performance (Salas and Fiore, 2004). Two factors make large contributions to group recognition and memory performance: consensus and correctness (Hinsz, 1990). The consensus factor indicates that the team is willing to choose a similar or alternative outcome. The correctness factor represents the finding that correct alternatives are more likely to be chosen in a group response. The correctness factor in group recognition memory performance is consistent with other research on group problem solving and judgment on intellectual tasks that shows that correct responses are more likely to be the group judgment rather than incorrect responses (Laughlin, 1980).

#### 2. Macrocognition and Microcognition

Macrocognition is a term coined by Pietro Cacciabue and Erik Hollnagel to describe the cognitive functions that are performed in natural (versus artificial laboratory) decision-making settings (Cacciabue and Hollnagel, 1995).

Most cognitive research has been conducted in laboratory environments, while this research is based on analysis of team communications that transpired during a real-world event. This is referred to as microcognition. Decisions made in the real world or natural environments are often very complex, in many cases involving data overload. As seen in the data analyzed for this thesis, the team was overloaded with information, faced many complex decisions, and had to grapple with very high levels of uncertainty as they tried to develop and accurate mental model of the events that transpired. Members of the participating organizations had to deal with a complex problem that had never before been encountered, nor imagined. Other factors that macrocognition addresses are that decisions are made under a limited amount of time and include high-risk

stakes. Additionally, these decisions are made under conditions that cannot be controlled which leads to extremely high variables in the study.

In an attempt to describe the relationship between macrocognition and microcognition, many scientists agree that it is too difficult to draw specific parallels on graphs because the information and processes are extremely intertwined. A comparison is presented in Table 1, which shows important macrocognitive phenomena and traditional microcognitive lab research.

Table 1. Important Macrocognitive Phenomena and Traditional Microcognitive Lab Research From (Klein, G., Ross, K. G., Moon, B. M., Klein, D. E., and Hollnagel, E., 2003).

Macrocognition	Microcognition	
Macrocognition phenomena of concern to domain practitioners	Parallel traditional microcognition of concern to cognitive scientists	
Planning and problem detection	Puzzle solving	
Using leverage points to construct options	Strategies for searching problem spaces	
Attention management	Serial versus parallel processing	
Uncertainty management	models	
	Estimating probabilities or uncertainty values	

Macrocognition comprises the mental activities that must be successfully accomplished to perform a task or achieve a goal (Klein et al., 2003). Macrocognitive functions are generally performed during collaborative team problem solving. The emphasis on macrocognition is on the cognitive functions and how teams can perform them. Technology offers a new level of complexity with macrocognition. Technology can help but in the same sense can hinder macrocognition.

Klein, Ross and Moon, (2003) offer the following diagram, Figure 2, which shows the relationships of the functions and supporting processes for individuals, teams and information technologies.

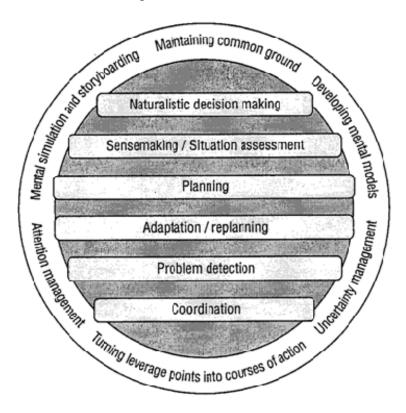


Figure 2. Macrocognitive functions and supporting processes for individuals, teams, and information technologies (Klein et al., 2003)

#### C. TEAMWORK AND TEAM PERFOMANCE

A team is typically defined as a group of individuals working interdependently toward a common goal (Ilgen, 1999). Team members may be interdependent in terms of their roles, goals, and outcomes, and the interdependence required to achieve the team objective involves each member of the team interacting directly or indirectly with each other member of the team (Sundstrom, 1999).

#### 1. Team Communication

To function effectively as a team, the team must operate as an information processing unit, maintaining situational awareness. Team cognition differs from individual cognition. To effectively perform as a team, each member must share knowledge and understand his/her team members. Team cognition thus requires communication - a process that has no quantifiable metric. In this thesis we coded and analyzed team communications based on the Office of Naval Research (ONR) macrocognitive process definitions. Communication requires both time and cognitive resources. When communications are more efficient, team performance benefits.

Communication plays a critical role in a team's ability to achieve coordinated action. Research regarding the measurement and analysis of communication behavior is an ongoing process. Cannon-Bowers and Salas, (1990), offered an influential introduction to the notion of cognition in teams, which they referred to as "team mental model" (Salas and Fiore, 2004).

Multiple research methods have been used to study and understand cognition. Analysis of team communication is typically achieved through the use of one or several of the following methods: repertory grids, verbal protocols, and card sorting. To date, most researchers focus their efforts on understanding team cognition in terms of common understanding, overlap, agreement, congruence or sharedness of cognition (Salas and Fiore, 2004).

#### 2. High Performing Teams

High performing teams typically have shared mental models. These teams will be more efficient, spending more time on performance and less time on organizing their actions. This is commonly referred to as mutual organizational awareness (Salas and Fiore, 2004).

High performing teams are also rated using the Task Load Index. Task inter-dependence and team structure jointly defined the need for coordination and communication within the team. Figure 3 describes the relationship between

the structure of a team to efficiency of a team's communication. Multiple experiments have observed that the optimal team structure resulted in more coordinated use of resources to accomplish tasks therefore less need to communicate (Salas and Fiore, 2004).

From analysis of the data for this thesis, it is evident that many team members were trying to communicate, coordinate and use any asset at hand to conduct the mission. It is evident from the transcripts that there was severe chaos that indicates that the Task Load Index is a good measure for theoretical and laboratory data but not relevant for real world crisis events such as September 11, 2001.

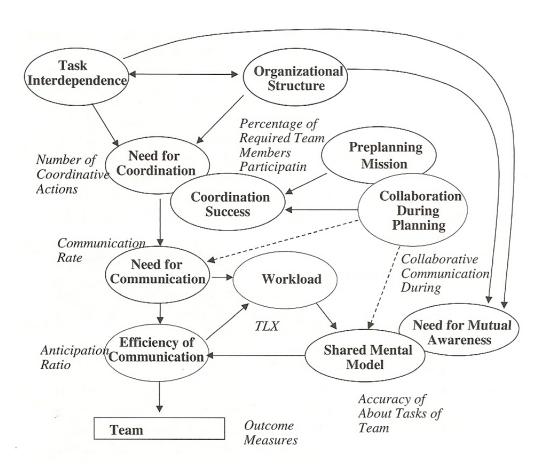


Figure 3. Framework linking team structure to communication efficiency: dotted lines indicate links not yet supported by data, TLX = Task Load Index. From (Salas and Fiore, 2004)

#### 3. Virtual Teams

A group of organizationally or geographically dispersed workers brought together to work on a common project through communication and information technologies is a virtual team (Godar & Ferris, 2004). Virtual teams usually conduct business via electronic means such as e-mail, video teleconference and collaborative planning tools. Many virtual teams operate on different continents. Technology and virtuality change work groups in three important ways: (1) they introduce new dimensions of communications among members by breaking the barriers of space and time; (2) they modify traditional group processes; (3) and they enormously enhance the group's capacity to access, share, manipulate, retrieve and store information.

There is limited empirical evidence that suggests that greater geographic distribution of a team leads to lower levels of performance. This perception is due to reduced face-to-face contact, limited opportunities for building social relationships, and the common belief that work was better conducted in the local vicinity of other team members (Pauleen, 2004).

In the military, most teams are by nature a hybrid of a virtual team. Commands are geographically dispersed and support locations across the globe. Unlike information technology (IT) or system engineering firms which are known for global team locations, the military's primary customer is the warfighter. Industry has the luxury of lower personnel turnover rates and pre-coordinated teams. On September 11, 2001, the team being analyzed in this thesis is an ad hoc virtual team. It involves many people at several organizations that had very little time to "Form, Norm, Storm and Perform" (Tuckman, 1965).

#### D. DECISION MAKING AND DECISION MAKING STYLES

#### 1. The Rational or Classical Model

The rational-economic (or classical) model is prescriptive in nature in that it focuses on how decisions ought to be made and assumes that the decision maker is completely rational and utilizes a search process that proceeds in a

planned, orderly, consistent and unbiased fashion. This model assumes that the decision maker has available all the information needed to make a decision and that all possible alternatives are considered. The decision maker makes the optimum decision. Decision making proceeds through the following sequence of steps: problem identification, development of criteria against which alternative solutions can be evaluated, identification of alternative courses of action, evaluation of alternatives, selection of the best alternative, and implementation (Lahti, 1996).

#### 2. The Administrative (or Behavioral) Model

This model is descriptive in that it describes how decisions are actually made. Decision makers seek to simplify problems and make them less complex because they are constrained by their individual capabilities. Examples of constraints are limited information processing ability and by organizational conditions such as availability of resources. The administrative model assumes that decision makers operate with bounded rationality; this means that decision makers are rational within a simplified model which contains fewer decision making criteria and fewer options. This model assumes that decision makers identify a limited number of decision making criteria, that they examine a limited range of alternatives which are easy to find, highly visible, have been tried before or are only slightly different from the status quo, and that they do not possess all the information needed to make a decision. The decision maker selects a satisficing alternative. This is an alternative that is "good enough" or satisfactory in that it meets the minimum criteria established for a desired solution. Decision making proceeds sequentially: alternatives are examined one at a time and the first satisfactory alternative that is found is selected (Lahti, 1996).

#### 3. The Implicit Favorite Model

The implicit favorite model is descriptive in that it describes how decisions are actually made. The decision maker seeks to simplify the decision-making process by identifying an "implicit favorite" before alternatives are evaluated; this

often occurs subconsciously. The decision maker is neither rational nor objective and unbiased. After a "favorite" is selected, the decision maker tries to appear rational and objective by developing decision criteria and by identifying and evaluating various alternatives; however, this is done in a biased way so as to ensure that the favorite appears superior on these criteria and thus, can legitimately be selected as the "best" solution. In this model, "decision making" is essentially a process of confirming a choice or decision that has already been made. The actual decision was made in an intuitive and unscientific fashion (Lahti, 1996).

#### 4. The Political Model

The political model is descriptive in that it describes how decisions are actually made. The decision maker is neither rational nor objective and unbiased. Since the group members have different agendas, they need to negotiate with each other. The process involves a cycle of bargaining among the decision makers in order for each one to try to get his or her perspective to be the one of choice - more specifically, to sway powerful people within the situation to adopt his or her viewpoint and influence the remaining decision makers. This model does not involve making full information available, since it is based upon negotiation that is often influenced by power and favors. In fact, information is often withheld in order to better maneuver a given perspective. In this model, potential problems and conflict often can be foreseen and minimized. Once powerful people have been swayed to support a particular viewpoint, other group members usually fall in line behind them. The nature of bargaining and maneuvering such as withholding information and social pressures can produce effects that are long-lasting and detrimental. Once they discover it, the individuals involved in the decision may not appreciate the duplicity inherent in the process (Lahti, 1996).

#### III. STRUCTURAL MODEL OF TEAM COLLABORATION

The Office of Naval Research (ONR) Warfighter Performance directorate established a series of studies and programs to help better understand and improve the effectiveness of team performance and decision making in unique and complex situations. The nature of most military operations makes them unique. They are normally conducted under high stress and often supported with uncertain data. Because of these factors they are very difficult to measure with regard to performance. The ONR research recognizes that not only should studies be done from a cognitive perspective, but also addresses the fact that military operations are interdisciplinary in nature. This program seeks to develop cognitive science-based tools, models, computational methods, and humanagent interfaces to help attain common situational awareness among multidisciplinary, distributed team members engaged in collaboration for issue resolution or decision-making. Collaboration is defined as working jointly with others or together especially in an intellectual endeavor (Merriam-Webster, Collaboration). It examines the cognitive aspects of joint analysis or problem solving for attaining shared understanding sufficient to achieve situational awareness for decision-making or creation of a product. Knowledge interoperability is the identification, collection, fusion and presentation of data for attaining comprehension of a situation at both the individual and team level (ONR, Science & Technology Warfighter Performance: Human Performance Division). The structural model of team collaboration, created by Warner, Letsky and Cowen, (2003) was developed as part of ONR's research programs (Warner, Letsky, Cowen, 2003).

#### A. PREVIOUS MODEL AND COMPONENTS

The initial model was finalized in 2003 but has since been updated and modified. This thesis used the revised model and macrocognitive coding categories however the original model is described below. It is important to note

that a model is not the system or process, but a representation of a system or process that helps researchers hypothesize and attempt to predict and understand the system or process (Warner et al., 2003). The original model developed by Warner, Letsky and Cowen, (2003) included an input, team knowledge base construction, collaborative team problem solving, team consensus, outcome evaluation and revision and output. These phases of the model do not necessarily have to occur in that order in fact, the data examined for several decision-making domains indicate that team collaboration is a highly iterative process (Hutchins, Kendall & Bordetsky, 2008.) A visual representation of the model of team collaboration is shown in Figure 3.

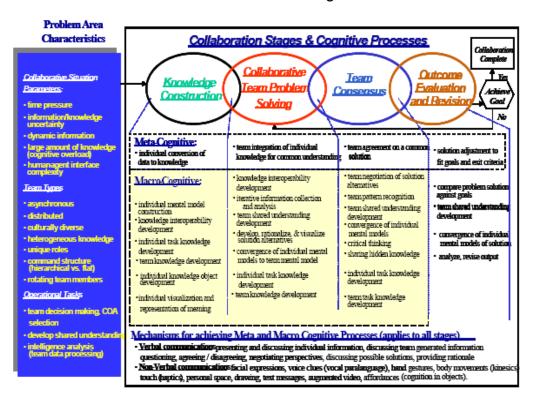


Figure 4. Model of Team Collaboration. (Warner et al., 2003)

Various mechanisms for communication are used through all stages of the model. These mechanisms include verbal and non-verbal communications however, since this thesis is based on verbal transactions only, it is impossible to identify or code any non-verbal behavior unless it was specifically alluded to in

the verbal communication. Verbal communications includedisagreements, questioning, discussing individual information, providing rationale, negotiation and agreement (Warner et al., 2003). Each phase of the model is further defined below.

# 1. Input

Input is the information that the team will receive to achieve the desired goal. Parameters that are considered are time pressure, dynamic information, technology, team types and the operational tasks.

# 2. Team Knowledge Base Construction

Team knowledge construction is the first phase of the problem solving evolution. This is when individuals gather information and gain the basic understanding of the problem at hand. They form their own individual mental model from the conversion of data to knowledge.

# 3. Collaborative Team Problem Solving

Collaborative team problem solving involves the individuals' mental models converging to form a team mental model. The knowledge is fused and iterative information is collected to determine which data is valid and which should be disregarded.

#### 4. Team Consensus

Team consensus occurs when the team is working together to agree on a common solution. The team is still monitoring the dynamic situation at hand and is brainstorming alternative solutions. The team uses team shared understanding, and critical thinking but is ultimately focused on the common outcome for the goal.

#### 5. Outcome Evaluation and Revision

Outcome evaluation and revision uses solutions and adjustments to fit the goals and provide the optimal solution for the problem. This is a revision stage that serves as a feedback loop for team shared understanding and convergence of team mental models.

# 6. Output

Output is the completion of the desired task. The model of team collaboration was not developed to measure the output, but rather study how the team functioned across all of the stages of collaboration and reached an output.

#### B. THE UPDATED MODEL

The previous version of the model of team collaboration had four phases excluding the input and output. The model used for this thesis utilizes five phases which are: Individual knowledge building, Team knowledge building, Developing shared problem conceptualization, Team consensus development and Outcome appraisal. It also includes a sixth phase that is useful when describing team collaboration for real world events. This phase was developed by Hutchins et al, (2008) as part of their research on MIO's, air warfare scenarios and firefighting scenarios. During their research they determined that in many cases, team members may need to issue orders for a course of action. The coding category is called Decision to take action and includes issuing a course of action (COA) and request to take action (RTA). The difference between the two codes lies in the nature of the relationship of the person issuing the order and the person whom the order is being issued to, as well as the severity of the order. In general an RTA occurs between peers or persons close in rank and the outcome of the action is not necessarily dire. A COA order is normally given from a superior, usually someone in command or with some significant authority, to a junior and the outcome of the action could potentially have significant affect on the outcome of the situation (Hutchins et al., 2008). Although these phases appear to be chronological in nature and in many cases teams move through them chronologically, it is possible, during an extended asynchronous scenario, to shift from an early phase to a later phase and vice versa. This describes how a collaborative effort can be both parallel and continuous.

In the context of the research for the current model, it must be understood that macrocognition is dynamic and iterative (Fiore, 2007). This means that team thought processes are both parallel and continuous. The best way to understand the process and how to quantify team collaboration is by recognizing what comprises a team and how to codify the foundational concepts associated with macrocognition.

For this thesis, the word team is defined as, "two or more people who interact dynamically, interdependently and adaptively toward a shared goal" (Salas, Dickinson, Converse & Tannenbaum, 1992). The team members during this crisis include everyone speaking and interacting on channel 2.

The codes used in this thesis were built upon and refined from the initial framework of collaborative problem solving. It is important to note that the model and the codes are have been refined by the Navy's Collaboration and Knowledge Interoperability Program (Letsky, Warner, Fiore & Salas, 2007). The codes are divided into five distinct levels or phases of cognition. Each of the codes, as originally written, will be explained under the pertinent phase of cognition below (Fiore, 2007). We modified this list of codes by excluding several codes, making changes to the code definitions, and adding several codes. These changes and the thought process behind them are described in the results chapter of this thesis.

#### 1. Input

Input is the information that the team will receive to achieve the desired goal. Parameters that are considered are time pressure, dynamic information, technology, team types and the operational tasks.

# 2. Phases of Cognition within the Model

Individual knowledge building is the first phase of the model after the task has been identified. In this phase, individual team members ask for clarification of the data, information and tasks. They also respond to other team member's requests by sharing information. This is a very rudimentary portion of the process because each individual is trying to develop their own mental model before they can contribute valuable membership to the team. The codes for this phase are as follows.

*Iterative Information Collection*: collecting and analyzing information to come up with a solution but no specific solution mentioned.

Individual Task Knowledge Development: individual team member asking for clarification to data or information about the task; or response to clarification about the task.

Individual Mental Model Development: individual team member using available information to increase his/her knowledge representation of the problem situation.

Team Knowledge Building is the second phase of team collaboration. During this phase, the team members participate in clarifying the information, data and understanding the task to build the team's knowledge. The greater the number of clarifications create a better team building process. The codes for this phase are as follows.

Pattern Recognition and Trend Analysis: Number of patterns communicated among team members; the time to detect those patterns and accuracy of the patterns.

Team Mental Model Development: the increasing similarity between an individual's knowledge representation and the team's knowledge representation through the process of individual team members convincing other team members to accept specific data, information or knowledge.

Recognition of Expertise: calculated by comparing an individual's perceptions of fellow members expertise with actual individual level metrics of expertise. This individual level metric of recognition of expertise can be aggregated to the team level by averaging the individual scores of the team. The closer the actual and perceived rankings, the better the team is at recognizing expertise (Bonner, 2004).

Sharing Unique Knowledge: is an exchange process where any information uniquely held by an individual is made available to all other group members and the group uses this information in their option selection process. The greater the number of unique information items that become available to the group, the greater the shared unique knowledge.

Uncertainty Resolution: The progressive minimization of sources of uncertainty in a decision environment. The greater the number of uncertainty sources that are reduced, the higher the uncertainty resolution.

Knowledge Interoperability: defined as the process of individual team member's exchanging their knowledge of the problem situation such that agreement is reached among team members with respect to a common understanding of the topic's meaning.

Developing shared problem conceptualization is the third phase of team collaboration. The development of shared problem conceptualization is best described as the team members sharing their understanding of problem goals, characteristics of the environment and the rules for operating to produce quality solutions for the problem. In this process or phase of macrocognition, the team utilizes collaborative activities to build and reinforce the perceptions and conceptual understanding of the team's problem (Fiore, 2007). This is accomplished with sharing, information transfer and use of visualization of the data. In this phase, the team will typically establish a common ground. The codes for this phase are as follows.

Visualization and Representation of Meaning: Visualization is where individual team members use methods such as graphs and pictures to transfer meaning to other team members. Representation is where individual team members use methods such as note pads to sort data and information into meaningful chunks

Building Common Ground: Common ground equals the amount of redundant terms (x) emerging within the group activity over the total number of words (n) generated by the group (i.e. cg = x/n; whereas the lower the number the greater the common ground among the team)

Knowledge Sharing: The number of pieces of information passed to another team member. The amount of knowledge shared between two team members is equal to the number of pieces of information given by one team member divided by the amount of new knowledge gained from the second team member (measure by pre/post session questionnaire). The smaller the ratio (items/new knowledge), the greater the knowledge shared.

Knowledge Transfer. The act of exchanging useful, actionable knowledge among team members. The more actionable knowledge exchanged, the more knowledge transferred. The term knowledge is defined and used according to the definition and principles of Bellinger, Castro and Mills 2004. Knowledge represents a pattern that connects and generally provides a high level of predictability as to what is described or what will happen next. The greater the number of exchanges, the more knowledge that is shared (Bellinger, Castro and Mills, 2004).

Team Shared Understanding: Discussion among all team members on a particular topic or data item (i.e. discussion does not involve answering questions).

Team Consensus Development: Is the phase when there is the onset of the major macrocognitive process that allows for option generation (Fiore, 2007). The team will negotiate for a solution option and will be accomplished by the

collective agreement by the members. This may not be the solution but it is an option discussed by all. The codes for this phase are as follows.

Critical Thinking: Critical thinking impacts decision processes and outcomes and can be indirectly measured through the following: (number of issues considered in an assessment, number of conflicting pieces of evidence identified, number of explanations of conflict generated, number of alternative assessments generated, accuracy of assessment (agreement with subject matter experts), consensus on assessment, confidence in assessment, frequency of contingency planning, subjective evaluations of process. Higher scores on these metrics indicate better critical thinking (Cohen, Freeman, and Thompson, 1998).

Mental Simulation: Individual team members or the whole team using their mental models (i.e. individual or team respectively) to run a mental simulation of what might happen over time. Pattern matching between features of the current situation and those of previous similar situations in order to base projections on the outcomes of the current situations. Measures of mental simulation content could include pre/post session questionnaires, and concept maps; mental model occurrence measures could include detection of communication utterances describing comparisons to similar problems and projections about current problems.

Intuitive Decision Making: The number of team decisions derived by the team members recognizing the situation as typical, so they immediately know what course of action they will implement. They immediately know the goals, priorities and the steps of the course of action in the given situation.

Iterative Information Collection 2: Collecting and analyzing information to come up with a solution but no specific solution mentioned.

Solution Option Generation: Generating reasonable alternatives in a decision problem that satisfy the list of requirements.

Storyboarding: The process of visual thinking and planning, which allows a team to brainstorm together along with placing and arranging their ideas on cards

before taking action. Measures for effective storyboarding include counting the number of cards necessary for explaining a concept or idea, evaluate the coherence of the plan by investigating the smoothness of topic shifts and time jumps among individual threads and evaluate whether the storyboard has enough content to sufficiently describe the plan.

Team Pattern Recognition and Trend Analysis: Number of patterns communicated among team members; the time to detect those patterns and accuracy of the patterns.

Team Negotiation of Solution Alternatives: Team negotiation is defined as the number of changes of solution alternatives by the total team divided by the total time to reach agreement. The larger the ratio, the more effective the negotiation.

Outcome Appraisal: Is the final macrocognitive phase or process where the team evaluates the selected solution option against the problem's goal. This requires the process of feedback interpretation and sometimes will require replanning. Some teams may adapt or completely change the solution if the problem's goals have not been met (Fiore, 2007). The codes for this phase are as follows.

Feedback Interpretation: The whole team discusses the selected solution option against meeting the problem goal resulting in either completely meeting the goal or areas that need to be discussed further.

Re-planning: The initial plan is defined as the preliminary course of action developed by the team. No behavior leading up to the initial plan is included in the re-planning process. Re-planning can be measured by counting the number of changes made to the *initial* plan until final plan is achieved.

# 3. Output

Output is the completion of the desired task. The model of team collaboration was not developed to measure the output, but rather study how the team functioned across all of the stages of collaboration and reached an output.

THIS PAGE INTENTIONALLY LEFT BLANK

#### IV. METHODS

#### A. AUDIO CHANNEL SELECTION

There are currently recordings of 24 channels available to the public, each of a different communication channel used at NEADS on September 11, 2001. Each channel begins at approximately 0830 Eastern Standard Time (EST) and ends at approximately 1509 EST. After a careful scrub of each of the channels, we determined that channel 2 was the best channel to use because the primary speaker on the channel was the primary decision maker regarding the NEADS response to the crisis.

#### B. TRANSCRIPTION

Once we decided to use channel two, we searched for a professional transcription company that could complete the transcription quickly and cost effectively. We chose escriptionist.com because they guaranteed a five-day turnaround and use a Microsoft Word format that is easily transferred into a Microsoft Excel spreadsheet. Escriptionist.com was also able to work around the fact that the audio is at times difficult to hear and includes some extreme background noise and interference. Escriptionist.com did an excellent job of transcribing the channel especially considering the length and quality of the audio channel.

Once escriptionist.com returned the completed transcription, we took several days to listen to the audio file while reviewing the transcription for completeness and accuracy and made changes based on our understanding of the NEADS organization and military terminology and protocol.

#### C. PRACTICE CODING

Before the coders began the actual coding process, the cognitive process definition included in the model developed by ONR were examined and studied by the entire thesis team. The coding process developed over several stages.

Initially, the coders coded one hundred lines of the transcript from the Socias, 2008, thesis for practice with the purpose of familiarizing the coders with the coding process. The coders then met with our thesis advisors to review the coding and gain insight into how and when each code should be used. The coders then coded one hundred lines of the channel two transcript and then met with the thesis team for further coding calibration. During the initial coding process the channel two audio file was often reviewed to resolve uncertainty as to the wording, meaning, intonation or intention of vague verbal turns in the transcript.

# D. REMOVING COGNITIVE PROCESS CODES AND CHANGING DEFINITIONS

Prior to final coding and based on our discussions during the two practice coding sessions, we determined that we needed to make some minor changes to the codes. Because the new macrocognitive processes included in the structural model of team collaboration have been updated since June 2007, but some appeared to be used mainly in a controlled laboratory environment, we have made some changes to reflect the type of data we would be analyzing from the real world environment. In general, we modified the definitions of codes that required a calculation or metric as part of the definition and eliminated codes that were completely dependent on calculations or metrics. The changes we made are described below.

As previously described, we added the *decision to take action category*, which includes the cognitive categories *course of action (COA)* and *request take action (RTA)* based on research conducted by Hutchins, Kendall, and Bordetsky, (2008). The inclusion of these codes is appropriate in this case because NEADS is a military organization where giving or receiving orders is common place.

Under the cognitive category of *team knowledge building*, we have made changes to the following codes; *Pattern recognition and trend analysis (PRTA)* 

<sup>&</sup>lt;sup>1</sup> As per discussions with Sue Hutchins and Tony Kendall

and Recognition of Expertise (RE). We shortened the definition of PRTA to read; "patterns communicated among team members" vice "number of patterns communicated among team members; the time to detect those patterns and accuracy of the patterns." We cut the portions regarding the "number of patterns" and "time to detect those patterns and accuracy of the patterns" because we are using the code to identify single instances of pattern recognition or trend analysis. Identifying the number of patterns and time to detect those patterns and accuracy of the patterns may be useful as a metric but must be done separate from the coding process.

RE was eliminated as a code because we had no way of knowing what individual team members perceptions were regarding fellow member's expertise. In addition, we did not have access to actual individual level metrics of expertise in this subject area. The data that would be developed by following the specified definition of RE could be helpful in determining the ability of the team to accomplish the task at hand but it is not useful as a code for coding single verbal transactions.

Under the cognitive category of developing shared problem conceptualization, we have removed the code building common ground (BCG) because the definition does not indicate how or when it should be used as a code. Instead, the definition requires a calculation. The calculation is done by dividing the number of redundant terms used by the total number of words spoken during the event. The number generated by the calculation would then indicate what level of common ground the team reached. This calculation would need to be taken at given intervals during the event to determine if the team was in fact reaching a common ground. If the number is lower as the event goes on the team is reaching a common ground. If the number is larger or stays the same as the event goes on the team is not moving toward reaching a common ground. While this calculation is useful in understanding how the team is performing, it is not useful as a code for individual transactions. We have also removed the code knowledge sharing (KS). According to the definition of the KS code, it again

requires a calculation as well as a pre-and-post event questionnaire. Because we are examining a real world event, it is not possible to have a pre-and-post event questionnaire.

Under the cognitive category of team consensus development, we have made changes to the following codes; Team pattern recognition and trend analysis (TPR1) and team negotiation of solution alternatives (TNSA). The definition of TPR1 has been changed to read; "patterns communicated among team members" vice "number of patterns communicated among team members; the time to detect those patterns and accuracy of the patterns." We cut the portions regarding the "number of patterns" and "time to detect those patterns and accuracy of the patterns because we are using the code to identify single instances of pattern recognition or trend analysis. Identifying the number of patterns and time to detect those patterns and accuracy of the patterns may be useful as a metric but must be done separate from the coding process.

The definition of *TNSA* was shortened to read "the team negotiates solution alternatives" vice "team negotiation is defined as the number of changes of solution alternatives by the total team divided by the total time to reach agreement. The larger the ratio, the more effective the negotiation." The original definition requires the analyst to count the number of times solution alternatives are negotiated and then divide that number by the time it took to team to reach a final agreement. This ratio could be useful in determining the effectiveness of the team but does not allow *TNSA* to be used as a code for individual transactions.

Under the cognitive category of *outcome appraisal*, we made changes to the team pattern recognition and trend analysis (TPR2) category. Because TPR2 falls a under higher level cognitive category, it will be assessed at a higher level than TPR1. The definition of TPR2 has been changed to read; "patterns communicated among team members" vice "number of patterns communicated among team members; the time to detect those patterns and accuracy of the patterns." We cut the portions regarding the "number of patterns" and "time to detect those patterns and accuracy of the patterns and accuracy of the patterns because we are using the

code to identify single instances of pattern recognition or trend analysis. Identifying the number of patterns and time to detect those patterns and accuracy of the patterns may be useful as a metric but must be done separate from the coding process.

### E. THE FINAL CODING PROCESS

For the initial round of final coding, the coders as well as one advisor, each coded 650 lines of code individually. Once the individual coding was completed, the entire thesis team met to discuss each verbal transaction, compare the results of the individual codings, and determine a final agreed upon code. This process initially took three hours per 200 lines of the transcript. The coding process became more efficient as the coding continued and the coders became more comfortable with the codes and developed a better understanding of their meaning. At times, the transcript was confusing because it includes partial conversations (e.g. only one end of the telephone conversation could be heard or a person was answering or responding to a question from someone that could not be heard on the recording) and information from background noise that is not relevant to the job of the MCC position. When problems like this arose, the coders occasionally listened to the recording while coding in order to reduce uncertainty. However, when there was disagreement about the meaning of a particular verbal turn the transaction was coded as written. The entire coding process for all 2337 lines of the transcript took approximately three weeks to complete.

After the first 650 lines of the transcript were completed, our advisor no longer coded. However, the entire thesis team met on several occasions to discuss the final codes for the first 1200 lines of code. During these meetings, the team developed a common understanding of the codes and definitions, which differ slightly from the original codes and the literal definitions as initially written. We also felt that it was necessary to add several codes. Our understanding of the

cognitive process codes and the cognitive process codes we added are described in the results section of this thesis.

After the first 1200 lines of the transcript were coded, the thesis team determined that our understanding of the codes was sufficient to complete the coding process without the input of our advisors.

The complete transcript for channel 2 contains 3511 verbal transactions. However, we coded through 2337 lines of the transcript. We decided to do this for two reasons. The first reason is that the number 3511 is an arbitrary number. Escriptionist.com's method for transcription was to add a new line each time they determined a new speaker was speaking. However, after careful examination of the transcript and comparison to the audio we were able to determine that at times a single conversation is broken into multiple lines even though it is the same person talking. This may have occurred for several reasons. First of all the audio is not high quality and therefore, it is difficult to distinguish between voices other than male and female. At times when a person speaking paused for some reason the transcriber probably, thought that another person started speaking after the pause and therefore started a new line of text. Another reason the text was broken is that at times the MCC, the primary team member speaking on channel 2, did not speak. When he was silent the recorder picked up pieces of background conversations that were not of value for the analysis of channel two.

The second reason for stopping at line 2337 was because all of the major events for the day had been completed. The events that take place beyond line 2337 are more along the lines of "cleanup" rather than response to a crisis situation.

# F. AUDIO ANALYSIS SOFTWARE

Prior to sending the audio file for channel two to be transcribed by escriptionist.com we removed the dead air or down time from the file by using the audio software Creative Wave Studio version 7.10.15. Creative Wave Studio, a copyright of Creative Technology Ltd., 1992-2006, is one of many similar

applications that can be used for this type of audio file manipulation however, wave studio is simple to use and met our needs. The software was also used to determine the exact time different events occurred at NEADS. This allowed us to lay a timeline of significant events against the verbal transcript. We did this in order to gain some insight into when the actual September 11, 2001, events were occurring and when the people at NEADS were first hearing about the events and how long it took them to react.

THIS PAGE INTENTIONALLY LEFT BLANK

#### V. RESULTS

#### A. CODING RESULTS

It is important to note that many communication turns within the transcript warranted more than a single code. Each communication turn included anywhere from one word to almost a full paragraph of text. Many communication turns had numerous nuances and conveyed several messages, therefore required multiple codes.

When the analysis and coding process was completed, the codes, representing the cognitive processes used by the NEADS decision makers, chosen by each coder, and the final code were entered into the excel spreadsheet next to each corresponding communication turn. This was done so that the coders could be compared to each other to determine the inter-rater reliability (IRR) score and so that the total number of final codes and the specific number of each final code used could be tallied and analyzed. The number of final codes used was 2700 which includes 500 miscellaneous (MISC) communication turns and 192 not codeable (NC) communication turns. In the data analysis, the misc and NC codes were only used when determining the percentage of each code used. The MISC codes were also used when determining the IRR however, the NC codes were not used in this calculation.

# 1. Additional Codes and Code Definition Interpretation

As a matter of course, the two primary coders did not always select the same code or same number of codes for each communication transaction. Each communication turn was debated during the final coding meetings and a final code was eventually agreed upon. When final coding was complete, there were no final codes that the coders did not agree upon. A key result of the coding process is that the thesis team determined that the addition of several codes was necessary to capture the cognitive processes that occurred at the MCC position.

The thesis team also had numerous discussions regarding the interpretation of the definitions for several codes, which helped determine when certain codes were appropriate.

Under the cognitive category of *individual knowledge building*, we used the cognitive process code *iterative information collection (IIC)* when an individual first asks for or collects a piece of information. When a team member asks for clarification to information that has already been collected, we used the cognitive process code *individual task knowledge development (ITK)*. In both cases, the code used for the response to the question is same as the code used for the question.

The cognitive process codes that were added, based on this research, are Individual Task Knowledge Development 2 (ITK2), Team Mental Model 2 (TMM2), and Knowledge Transfer (KT2). ITK2 and TMM2 were added under the fourth cognitive phase of the model, team consensus and development. Our determination to add these codes under the fourth cognitive phase was because in the later stages of the problem the team had already developed a solid mental model regarding the situation and had asked all of the questions necessary to develop their original mental model. While they were initially asking questions and developing a team mental model, it was appropriate to use ITK which falls under the first cognitive phase, individual knowledge building, and TMM which falls under the second cognitive phase, team knowledge building. The nature of the problem was such that the continuous information flow inundated the decision makers. New information required the individuals and the team as a whole to ask questions to clarify this new information and make modifications to their initial mental models. It would have been misleading to characterize these questions and updates to the mental model with ITKs and TMMs because the individual was clearly beyond the individual knowledge building phase of the mental model.

The thesis team's definition of *Team Mental Model (TMM)* and *Team Shared Understanding (TSU)* developed and changed slightly over the course of the coding process. The original definition of *TSU* is strict in that it requires "all team members" to discuss a topic or piece of data. The nature of the audio transcript is such that it would be impossible to know if "all team members" were included in a discussion. Therefore, we changed the definition to read "some team members" discuss a topic or piece of data.

Each coder frequently used the codes *TSU* and *TMM* separately to characterize the same communication turn. For example, coder one used *TMM* to describe a communication turn while coder two used *TSU*. The thesis team eventually decided that *TMM* was most appropriate when coding a communication turn that involved the development of the team's overall understanding of the situation. *TSU* was most appropriate when part of the team was being updated on a previously agreed upon response to the situation or a change in the response to the situation. Generally, *TSU* was chosen when it was obvious from the semantics and context of the communication turn that team members were sending or receiving updated briefs that did not necessarily contain new information but were crucial in keeping the team synchronized.

The cognitive process code *KT2* was added under the model's fifth cognitive phase *outcome appraisal*. As with *ITK* and *TMM*, it was determined that the initial exchange of actionable knowledge, requiring a cognitive process code of *KT*, would take place during the third cognitive phase of the model, *developing* shared problem conceptualization.

However, the process of planning and taking and recommending a course of action is not static and the MCC continued to update and modify the plan as the situation changed throughout the day. Communication turns that indicate this type of replanning and modification should fall under the fifth cognitive phase, outcome appraisal. To make changes to the plan the decision maker typically

needs new actionable information. Based on the definition of *KT* the thesis team determined that it would be prudent to add the code *KT2* to characterize actionable knowledge transfers that occurred as part of *outcome appraisal*.

Another clarification that was made was how and when to use the cognitive code sharing unique knowledge (SUK) versus knowledge transfer (KT). Initially coder one often used SUK to describe a communication turn while coder two used KT to describe the same communication turn. This research determined that the problem was that the often there is a great deal of overlap between the definitions of SUK and KT. Unique knowledge was characterized as knowledge that had not yet been shared with team. It is generally easy to pick out communication turns that add unique knowledge to the scenario. However, the act of sharing unique knowledge is also one step in the act of transferring or exchanging knowledge which is included in the definition for KT. Eventually, the team determined, that the key to deciding between the codes SUK and KT was whether or not the knowledge being presented was "actionable knowledge." The SUK code was used when knowledge was first presented to the team but was not necessarily "actionable knowledge" and the KT code was used when knowledge was exchanged that could be used to take some sort of action by the decision makers. Several examples of the initial difference in cognitive process code definition interpretation regarding *SUK* and *KT* are displayed in Table 2. As is shown by the final code selection, unique knowledge is not often immediately determined to be "actionable knowledge." Generally speaking, several pieces of unique knowledge need to be shared before the overall knowledge pool becomes something a decision maker can act upon.

Table 2. Examples of Difference in Interpretation of Definitions Between Coders for *SUK* and *KT*.

Transcript Line #	Communication Turn	Coder 1 Code	Coder 2 Code	Final Code
119	We just did a 25 mile track area, track production area	SUK	KT	SUK
267	I don't where they went though. I think 204 or 212. You can find them. They're team 23. Two crews airborne right now. Team 23 and team 24. New York Center will be working – they're up north-east of New York. Would be my guess. I can look at my computer.	SUK, ITK, VRM	KT, ITK	SUK, ITK, VRM
269	They're airborne. Two DC10s and they've got a lot of fuel there. They're heavyweights, so they'll have enough fuel to be airborne almost all day.	SUK, TMM	КТ	SUK, TMM
304	We just need somebody to call McGuire just in case. Not Whiskey 105 where they want FAA at Whiskey 105. They want to hold them in Whiskey 105.	SUK, RTA	KT, RTA	SUK, RTA
876	Then give them the FAA and then pass all the instructions. Okay. We're getting two from Alpino with guns. Confirm. I'm working that right now. We're getting it.	SUK, COA	KT, COA	SUK, COA

# 2. Unexpected Codes

In similar research, evidence for several cognitive processes was not found or some cognitive processes were not used often.<sup>2</sup> For example, in Socias, 2008, the codes *CT*, *IIC2*, *TPR1*, *TNSA*, *FI*, and *TPR2* were not used. Based on Socias, 2008, we did not expect to use the previously stated codes often, if at all. However, the final coding for this thesis revealed some unexpected use of several of these codes. The codes include: Critical Thinking, Mental Simulation, Solution Option Generation, Feedback Interpretation, and Replanning.

<sup>&</sup>lt;sup>2</sup> As per discussions with Hutchins and Kendall during final coding sessions.

The primary reason the coders for this thesis were able to apply the previously mentioned cognitive process codes to several communication turns in channel 2 is because the main team member on channel two is the MCC. The MCC during this crisis had the authority to make and execute very high-level decisions that had a critical impact on the resolution of the crisis.

As expected, a person making these types of decisions would need to apply the elements of critical thinking throughout the day. As per the definition given in this model, critical thinking "impacts the decision process and outcomes and can be indirectly measured." For a communication turn to justify a code of CT, it needs to satisfy a list of measures that include: number of alternative assessments generated, accuracy of assessment, consensus on assessments, confidence in assessments, frequency of contingency planning and subjective evaluations of the process. When these measures are quantified the level of critical thinking can be graded. The higher the score the better the critical thinking (Cohen et al., 1998). The nature of these transcripts make it difficult to determine when a team member is using critical thinking. However, by grouping several communication turns together it became evident that the MCC was in fact doing critical thinking. Table 3 shows one example of a grouping of communication turns that combine to reveal critical thinking.

Table 3. Communication Turns Coded as Representing Critical Thinking.

Transcript Line #	Communication Turn	Final Code
305	We need to be more effective at something and stick them –	CT
309	Okay. Well, we can't they're in the FAA airspace. Well, we can – yeah, they're ours. Yeah, they're mine. Okay.	CT
311	You know what? I don't like them there.	CT
313	It's flying low.	CT

On several occasions, the MCC also verbalized that he was trying to think ahead and determine what actions would need to be taken in the future based on any unforeseen actions the terrorists might take. This type of thought process calls for the code Mental Simulation (MS). Table 4 includes several examples of

the MCC using MS to try to get his team ahead of the game rather than be in a reactionary mode. Some of the key terms used in these communication turns that indicate the MCC is doing mental simulation are: transcript line number 290 "this is what I foresee" and transcript line number 543 "this is what we're expecting."

Table 4. Communication Turns Coded as Mental Simulation

Transcript Line #	Communication Turn	Final Code
205	Are you good with that? What – wait – don't put that in there. okay. Do we have a mission that we can pass to these guys? No, what they want to know is what kind of mission we passed to them hold. Do you see what I mean? Yeah, FAA as needed, and also we're going to be – we worked out with FAA we're gonna hold them south of the JFK for approximately 10 miles without any altitude that they can hold these guys at. We also have – main 85 whiskey 105. We can be used for this. We can scramble it, and we got this guy. Yeah. Okay. Bye. Okay. Tag them up. You good with that?	MS, TMM, RTA, ITK
290	Okay. Foxxy, plug in. Okay. Foxxy, this is what I foresee what we probably need to do. We need to talk to FAA. We need to tell them if this stuff's gonna keep on going. We need to take those fighters, put them over Manhattan. Okay. That's the best thing. That's the best play right now. So coordinate with the FAA, tell them if there's more out there which we don't know, let's get them over Manhattan at least we got some kind of play. Hold on	MS, RTA, COA
543	This is what we're expecting for the NCA area.	MS
740	What we're gonna have to do is talk to the commander there. He's gonna have authority of that. I'll work the deal. Yeah, Colonel Mar, he might need to call up the Toledo guy. Okay. Yeah.	MS

The natural progression from mental simulation is to move to solution option generation. Once mental simulation is complete, decision makers often move on to generate a list of options that satisfy the list of requirements identified through critical thinking and mental simulation. When this type of activity was identified it was characterized with the Solution Option Generation (SOG) code. Table 5 provides several good examples of when the MCC and his team worked through the solution option generation process. In particular transcript line

numbers 729-738 are excellent examples of the MCC and his team working to generate a solution that solves the requirement for the number of fighters he thinks he will need in the future.

Table 5. Communication Turns Coded as Solution Option Generation.

Transcript Line #	Communication Turn	Final Code
403	Okay. Talk to the guys from Suffolk. Those are the guys shits down there. FAA. Yeah, Boston Center or Boston has this shut down by Boston Airport, and anything that's in the air, they're diverting out. I've been talking with Mr. Scoggins there from Boston center. He just wanted to know if we had any aircraft. I told him about the aircraft in the area that we have our fighters. Our fighters in the area, tankers and also – okay. Also we're in close contact, so If he sees anything squirrelly he's gonna give us a yell, and we're gonna press. Yeah. Battle Stations are sitting in the down stations right now. Two tankers from McGuire KC10s full, and I got 60,000 offload for the Main 85. Okay. We probably won't need them, but just status them anyway. What the hell? More the merrier. Yes, sir. The 15s are 0 by 2 by gun. My recommendation if we have to take anybody out large aircraft we use A9s in the face. Yes, 8B. No, but he just said I need what assets I have. And that's my recommendation is from earlier tests. Okay. He has guys going out to the 105. OTIS soft has recalled all it's pilots for possible use, so we got more aircrafts on standby. Yeah, what – what they're looking for is pilots I guess. So the recalled all their pilots as best as they can get. Right. Recall all their pilots?	SOG, RTA, SUK, RTA
534	Sure. You can have Alpha through Foxtrot, is that	SOG, ITK, ITK
535	Alpha through foxtrot will be fine for right now. 6 to 50 concurrent or exclusive.	sog
729	I'm talking to Toledo right now, and they maybe able to get somebody airborne.	sog
730	Okay. In case they find somebody else.	SOG
731	As far as the suffrages there they got F16s.	SOG
732	What about Duluth?	SOG
734	Duluth you got no fighters.	SOG
735	We'll call in units and ask anybody in that area that we have a possible hijack.	sog
736	I talked to the Great Lakes and Toledo, they're gonna get somebody out there. And Duluth has night flying, so there's nobody available.	SOG
737	Yeah, we're pushing it.	SOG
738	I'm sorry, but you're the closest guide.	sog

Throughout any crisis, key decision makers would be expected to listen to feedback on how well their selected course of action was meeting the goal. Once the feedback is considered, decision makers must decide whether to stay the course they have selected or whether they should begin to conduct some replanning. Table 6 provides an example of the MCC evaluating a decision that has been made and then making an effort to replan. In transcript line number 413, the MCC realized there was a third hijacked aircraft headed towards Washington. He quickly realized that the original number of response aircraft that were scrambled were not enough. He then replans by deciding that it will be necessary to scramble fighters from Langley to help deal with the new situation.

Table 6. Examples of communication turns coded as replanning.

Transcript Line #	Communication Turn	Final Code
413	Okay. Third aircraft hijacked heading toward Washington. Okay. American Airlines is still airborne 11, the first guy. He's heading toward Washington. Okay. I think we need to scramble Langley right now, and I'm gonna take the fighters from OTIS and try to chase this guy down if I find him. Yeah You sure. Okay. He's heading towards Langley or I should say Washington. American 11 the original guy he's still airborne. We're still getting a – we're getting position.	R, SUK, SUK

Table 7 provides some examples of communication turns where the MCC took time to conduct feedback interpretation and then replanned and selected a course of action based on the feedback.

Table 7. Examples of communication turns coded as feedback interpretation.

Transcript Line #	Communication Turn	
583	You guys switched 25 move in airspace and now you want him to go to Baltimore?	FI
584	Yes, sir. We're not gonna take him in Whiskey 386.	FI
585	Okay. Once he goes to Baltimore, what are we supposed to do?	FI
586	Just have him contact us on the auxiliary frequency 234.6. We just need – instead of taking handoff to us and then us handing him back. Just tell Center that they've got to go to Baltimore.	COA, R

# 3. Percentage of Codes

Analysis of the communication turns of the NEADS team members recorded on channel two on Setptember 11, 2001, reveals they used 22 of the 26 cognitive process codes, or 84.6%, of the cognitive processes included in the model. This calculation includes the codes, course of action and request take action, under the Decision to take action category, but does not include the codes miscellaneous and not codeable. The four codes not used were *intuitive* decision making (IDM), storyboarding (S), team pattern recognition 1 and team pattern recognition 2. Intuitive decision making (IDM) was not used because the definition calls for the team to recognize a situation as typical and therefore know exactly what course of action to take. The events of September 11, 2001, were anything but typical and did not present the kind of situation where the team at NEADS could rely on stored schemas. This highly novel, unanticipated scenario forced them into a reactionary mode that did not allow for intuitive decision making.

Storyboarding (S) was not used because the definition requires the analyst to determine if the team used the process of visual thinking and planning which requires the team to write and arrange their ideas on cards before taking action. While this type of brainstorming before deciding on action may have occurred at NEADS, because of the nature of the audio transcripts it is impossible to determine if it did take place. In addition, this type of decision making process is best suited for situations that allow for extended periods of time before a decision is made. In the case of the team at NEADS, each decision had to be made quickly and probably did not allow for storyboarding (S).

TPR1 and TPR2 were not used because the modified definition we used, as described in the method section, required the team to recognize patterns and then communicate those patterns to the rest of the team. Aside from the initial recognition that there was a pattern developing regarding an unknown number of hijacked aircraft that were supposed to be heading to certain destinations but were not, the team did not verbalize any other pattern recognition. This initial

recognition of a pattern was assessed as occurring during the cognitive phase of team knowledge building and given the code *PRTA*. Table 8 displays the only two communication turns that revealed a pattern recognition of any kind for the entire transcript.

Table 8. Communication turns coded with PRTA.

Transcript Line #	Communication Turn	Final Code
37	767. 200 series. No idea how many people on board right now. They came from Boston; they're supposed to be going to LA. And they're headed south. They're going the wrong way, obviously.	PRTA, ITK
79	Mode 3 1443. Last known. No, this is real world. Okay were in the high check. Sir, last know position that we got out of this guy was right there at the V point. He's heading 190 at 29,000 feet. He's heading down. So we're looking for somebody – you know what just start hitting up tracks all around that area that V point. Okay. Just north of ahh there.	PRTA, KT, RTA

#### 4. Trends in the Codes MISC and NC Excluded

ITK2 was the code most used with 506 out of 2008 (25.2%), ITK2. This is significant because it shows that the team was constantly trying to update their mental models. The key indicator for the code ITK2 is when a team member asks a question and another team member gives a response. The team at NEADS was forced to continuously ask questions in order to ensure clarity because the situation on September 11 was constantly changing. ITK2 was used more often than ITK because we characterized questions asked in the initial stages of developing the team mental model with ITK. The team was able to develop a consistent model after the second airplane hit the twin towers. Beyond this time period in the transcript the team made adjustments to their mental model but this was done at a higher level of cognition. Adjustments to the team mental model usually come after a series of questions or clarifications are asked and these questions and clarifications were given the code ITK2. Table 9 shows the cognitive codes and their respective percentages including the code MISC and NC.

Table 9. Frequency and Percentage of Cognitive Processes Used Excluding the Codes Miscellaneous and Not Codeable.

Code	Cognitive Process	Number	Percentage
Individual Knowledge Building			
IIC	Iterative Information Collection	13	0.06
ITK	Individual Task Knowledge Development	323	16.09
IMM	Individual Mental Model Development	38	1.89
	Team Knowledge Building		
PRTA	Pattern Recognition and Trend Analysis	2	0.01
TMM	Team Mental Model Development	38	1.89
SUK	Sharing Unique Knowledge	133	6.62
UR	Uncertainty Resolution	23	1.15
KI	Knowledge Interoperability	28	1.39
	Developing Shared Problem Concepts	ualization	
VRM	Visualization and Representation of Meaning	180	8.96
KT	Knowledge Transfer	75	3.74
TSU	Team Shared Understanding	245	12.20
	Team Consensus Developmen	nt	
СТ	Critical Thinking	5	0.25
MS	Mental Simulation	13	0.65
IDM	Intuitive Decision Making	0	0.00
IIC2	Iterative Information Collection 2	3	0.15
ITK2	Individual Task Knowledge Development 2	506	25.20
SOG	Solution Option Generation	35	1.74
S	Storyboarding	0	0.00
TPR	Team Pattern Recognition	0	0.00
TNSA	Team Negotiation of Solution Alternatives	29	1.44
TMM2	Team Mental Model Development 2	42	2.09
Outcome Appraisal			

FI	Feedback Interpretation	30	1.49		
R	Replanning	10	0.50		
TPR2	Team Pattern Recognition 2	0	0.00		
	Decision to Take Action				
RTA	RTA Request Take Action 164 8.17				
COA	Course of Action	73	3.64		
Total		2008			

Miscellaneous codes are important communication transactions that allow team members to "close the loop" on conversations but are not valuable for this thesis' data analysis. The code NC was required for this analysis because numerous lines of the transaction were incoherent or incomplete. Many of the communication turns characterized with MISC were the relay of phone numbers from one organization to the next, as responders realized they needed to contact other commands to inform them of the situation. Appendix D includes a table that shows the percentage of codes used with the miscellaneous data and not codeable data removed.

#### B. INTER-RATER RELIABILITY ANALYSIS

The use of two coders to code the transcript allowed for a test of the model regarding the relative subjectivity of the coders in their understanding and application of the codes when considering the cognitive processes included in the model. This test is referred to as the inter-rater reliability test. The inter-rater reliability analysis measures the degree of agreement between the two coders. It is useful as a tool to help refine the model so that the cognitive process definitions are explained in such a way that any coder trained in applying the model could reach an acceptable level of consensus when coding a given transcript. A low score could indicate that the coders need more training or that the model definitions need to be refined.

The inter-rater reliability analysis for the initial independent coding by the two coders shows that the coders agreed on 1797 codes for the 2338 communication turns coded or 76.89% of the time. During the final coding sessions, there were numerous discussions regarding clarification of how the individual codes should be used. This along with the slightly low inter-rater reliability score indicates that the macrocognitive process definitions may need to be modified or clarified for future application. For final coding although there was often debate over what final code to use, in the end the two primary coders agreed 100% of the time on which final code to use.

#### C. COGNITIVE PHASES

After coding was complete, it became evident that the NEADS team was forced to shift their mental model several times throughout the day. The statistical analysis of the data was accomplished by dividing the transcriptions into four different time phases. These time phases were chosen based major event occurrences throughout the day where we predicted that the team's mental model and cognitive phase would change.

# 1. The First Phase of NEADS Mental Model Development

The first phase of analysis was based on individual mental model development. It began at the beginning of the incident through the first plane hitting the World Trade Center. During this time there was a lot of confusion at NEADS. NEADS had been conducting an exercise that included hijackings, at the time of the 9/11 attack, which distracted the team from developing a real-world mental model. When the initial information of the possible hijacking reached the MCC, the key leader was not in the work space. This required personnel of lower rank and less experience to make decisions in his absence.

Before September 11, 2001, the individual mental model typically understood or expected that the standard hijack would result in a plane landing at a discussed airport and negotiations for the conditions of release of the passengers would take place on the ground. Nobody anticipated that the planes

would be used as a bomb or missile. When the first aircraft hit the World Trade Center everyone had to shift their mental model.

# 2. The Second Time Phase NEADS Mental Model Development

The second phase began from the time the first aircraft hit the first tower and continues until the attack on the Pentagon. During this phase it was demonstrated that there was a shift in thought process and team building. The team understood that it could no longer consider the hijackings as traditional and new ways of dealing with this sort of incident needed to be considered. The team began to become homogenous.

# 3. The Third Time Phase NEADS Mental Model Development

The third phase of analysis begins with the attack on the Pentagon through the time period when shoot down authority was granted. There has never been a precedence when commercial aircraft have been authorized to be shot down by a US Military aircraft over US airspace. During this critical phase of decision making on September 11, 2001, the Vice President of the United States granted full authority to shoot down any aircraft over US Airspace if it did not respond to military escorts, squawk modes two and three, or appeared to be hostile.

During phase three, there was a shift in targets from civilian entities like the World Trade Center buildings to political establishments such as the Pentagon and the White House. Every aircraft that was not accounted for was targeted as a threat. Additionally, all of the communications, including radios and commercial phone capabilities, were ineffective. The decision to launch E-3 Airborne Warning and Control System (AWACS) aircraft was done during this phase to support the loss of command and control.

# 4. The Fourth Time Phase NEADS Mental Model Development

The fourth and final phase of analysis of this data is from the timeframe after the authority to engage unidentified aircraft through the continuous effort to maintain situational awareness. During this final phase, there was still uncertainty as to if there were additional hijacked aircraft. Military fighters and tankers were patrolling in sectors over major US cities in the event that they had to escort or shoot down commercial aircraft. This final phase showed significant use of the cognitive process codes *replanning* (*R*) and mental simulation (*MS*).

To add to the confusion, US Army National Guard from New Jersey did not have modes two and three loaded in their helicopter that was transporting law enforcement officials to New York City. An F-16 fighter instructed the helicopter to land and would not allow the helicopter to go airborne until the correct modes and codes were uploaded. Due to the nature of the National Guard at that time, the modes and codes were constantly changing. A reassignment of law enforcement codes were subsequently assigned to the helicopters. Table 10 below detail the event described above.

Table 10. Example of Confusion.

Transcript Line #	Communication Turn	
2260	Okay. Here's a problem. I'm with the New Jersey Army National Guard.	TSU
2261	And I have couple UH60s up. A UH1 and a UH60 up trying to police from Trenton area and area up to Newark.	KT
2262	And we don't have the transponders squawking to set clearance to the area, so one of them just got put on the ground be a F16. not shot down, but told to land and don't take off again by an F16. So what I need is a transponder squawk so that these guys can interrogate us and let us know that we can clear through the area.	KT, SUK, RTA
2263	All right. What are you in New York's airspace right now?	ITK2
2264	No, we're in New Jersey's airspace.	ITK2
2273	We don't have a squawk that's the problem. We need to know the squawk we're supposed to be squawking in mode 4.	TSU, ITK2

2282	Your unit is assigned mode 2.	ITK2
2283	Yeah, but the problem is it's army code and they do changes.	KT
2284	Okay. Make sure they stay on their mode 2, they'll know they're military aircraft, but we need to ID them by mode 3. So I'll get you a mode 3, but I need the lat./long. position if you can get it.	RTA, ITK2

#### D. CHI-SQUARE ANALYSIS

The *chi-square distribution* (chi-square) is one of the most widely used theoretical probability distributions in inferential statistics, e.g., in statistical significance tests. It is useful because, under reasonable assumptions, easily calculated quantities can be shown to have distributions that approximate to the chi-square distribution if the null hypothesis is true (Keller, 2005). Chi-square, while not "proving" or explaining causality, can show significant statistical differences among the usage of the cognitive process codes and therefore highlight these variables for further chi-square investigation and discussion.

An analysis was completed to determine if there were significant differences in the distribution of cognitive process codes in relation to the different time phases as described above. The chi-square analyses were done in three different sub-sets of the data.

Sub-set 1: A comparison of all twenty-six macrocognitive process codes between all four time phases of the event.

- The *first phase* of NEADS mental model development (Start of event through the first airplane impacting the World Trade Center)
- The second time phase NEADS mental model development (The first airplane impacting the World Trade Center through the Pentagon attack)
- The *third time phase* NEADS mental model development (The Pentagon attack through the order from the Regional Commander to shoot down non-responsive aircraft)
- The fourth time phase NEADS mental model development (Shoot down order through the end of the event)

Sub-set 2: A comparison of all twenty-six cognitive process codes between each time phase of the event compared to all other time phases of the event combined.

- First time phase compared to the combination of the second third and fourth time phases.
- Second time phase compared to the combination of the first, third, and fourth time phases.
- Third time phase compared to the combination of the first, second, and fourth time phases.
- Fourth time phase compared to the combination of the first, second, and third time phases.

Sub-set 3: A comparison of all codes from the first three macrocognitive phases (individual knowledge building, team knowledge building, and developing shared problem conceptualization) and the last three macrocognitive phases (team consensus development, outcome appraisal, and decision to take action)

- Macrocognitive phase 1-3 compared to time phase 1 and 2
- Macrocognitive phase 1-3 compared to time phase 3 and 4
- Macrocognitive phase 4-6 compared to time phase 1 and 2
- Macrocognitive phase 4-6 compared to time phase 3 and 4

In each case, we expected to see some statistically significant difference in the use of the different macrocognitive processes compared to the four time phases. We expected this because the NEADS team appeared to make major changes to their mental model as the day progressed.

Sub-set 1: A comparison of all twenty-six macrocognitive process codes between all four time phases of the event. The data used to calculate the chi square value for sub set 1 is displayed in Appendix C.

When all of the twenty-six cognitive phase codes were compared across all four time phases of the event (sub-set 1), the chi-square value (75 df) was 1211.22 and alpha < .01. There is less than a 1% probability that the

results we generated happened randomly (Type I error). However the chi-square test on this sub-set of data only reveals that there is some significant difference between one or more of the time phases, it does not reveal which time phases are different.

Sub-set 2: A comparison of the frequency of use for all twenty-six cognitive process codes between each time phase of the event compared to all other time phases of the event combined. The data used to calculate the chi-square value for sub-set 2 is displayed in Appendix C.

After determining that there were some significant differences in the frequency of occurrence of the cognitive processes of the model of team collaboration between the four time phases, we decided to compare the twenty-six cognitive phases across one time phase at a time in relation to all of the other time phases combined (sub-set 2). The resulting chi-square value for each comparison made is displayed in Table 11 below. The results show that there is a significant difference between the cognitive phase the team was in during each time phase when compared to the cognitive phase they were in during the other three time phases. The chi-square value for each comparison is large enough with one degree of freedom that the probability these results happened randomly is less than .01.

Table 11. Summary of Chi-Square Analysis for all Twenty-six Cognitive Process Categories between Different Time Phases.

Time phase	Time phase	Chi-square value	Degrees of Freedom	P < X
1	2, 3 and 4	357.81	25	P<.01
2	1, 3 and 4	680.37	25	P<.01
3	1, 2 and 4	94.78	25	P<.01
4	1, 2 and 3	548.42	25	P<.01

Sub-set 3: All codes from the first three macrocognitive phases (individual knowledge building, team knowledge building, and developing shared problem conceptualization) and the last three macrocognitive phases (team consensus development, outcome appraisal, and decision to take action). The data used to calculate the chi square value for sub set 3 is displayed in Appendix C.

Finally, we completed a chi-square analysis for the first three macrocognitive categories, and the last three macrocognitive categories, between time phase 1 and 2 combined and time phase 3 and 4 combined. We did this because, in general terms, the first three cognitive categories entail data collection and individual and team mental model development while the last three cognitive categories entail actual decision generation, execution and evaluation. Because the decision to take action category involves the process of executing decisions we grouped it under the later cognitive categories. We grouped time phase one and two together and three and four together because we expected that there would be a significant difference in the team's cognitive processes used during the first two time phases relative to the last two time phases. As displayed in Table 12, the results of the chi-square analysis show that there is in fact a significant difference in the team's cognitive processes between the two groupings of time phase. I.E. the teams cognitive process was significantly different during time phase one and two as compared to time phase three and four. Again there is a less than 1% chance that the results produced occurred due to random chance.

Table 12. Summary of Chi Square Analysis for Cognitive Categories 1-3 and 4-6 Between Time Phase 1-2 and 3-4.

Time phase	Time phase	Chi-square value	Degrees of Freedom	P < X
1 and 2	3 and 4	158.57	1	P<.01

#### E. ADHERENCE TO SOP

We did not have access to the NEADS SOP, because they are classified, however they have one and they followed it because it was most likely developed to deal with a standard model of hijacking i.e., terrorists hijack a plane, find a place to land, and threaten to kill hostages if their demands are not met.

Throughout the day the NEADS team was forced to deal with a different model and adapt their SOP to deal with this new situation. Fortunately the MCC was able to adapt to the situation and make key decisions that he would not normally be asked to make. An example of a communication turn where the MCC verbalized this is displayed in Table 14.

Table 13. MCC Taking Things Into His Own Hands.

Transcript Line #	Communication Turn	Final Code
770	Turn them. I'll pay for it. I got a credit card. Okay. At what two – Yeah, well, we're going there. Okay. Yeah, I'll tell you what the history on that is. The fucking Giant Killer sent them out to 386. Yeah, it's going – yeah, that's what I did. Well, we couldn't get them. Okay. Bye. Make sure where the information came from that the Pentagon was hit though. I don't know where –	COA, TSU, TMM2
1866	I'll be the one going to jail. Hey, what the hell? I'll take you out, Bubba. Okay. You are on orders. I don't care. It's authorized. I authorized a bunch of people.	MISC

#### F. CONCLUSION

Throughout the day on September 11, 2001, the team at NEADS was forced to deal with an extraordinary situation that had never occurred before. Team members were forced to be flexible and adapt and change their pre-existing mental models for how most previous hijackings developed and concluded. Fortunately, the MCC was able to adapt to the situation and made key decisions that he would not normally be asked to make.

#### 1. Use of the Codes

The events surrounding the NEADS participation in the September 11 crisis provided an excellent test of the structural model of team collaboration. Analysis of the communication turns at the MCC position show that they used 22 of the 26 cognitive process codes. This does not indicate however that the codes that were not used are irrelevant for the model. It was simply too difficult to determine if the cognitive processes defined by those codes were actually taking place because of the nature of the audio on channel 2.

#### 2. Chi-Square Results

The results of the chi-square analysis lend further weight to the validity of the model. The results show that the team moved between the various cognitive phases suggested by the model throughout the day. While the model does not implicitly suggest that a team will move from the earlier cognitive phases to the later cognitive phases of the model in a smooth progression the research for this thesis indicates that the NEADS team definitely made a progression from the earlier cognitive phases to the later cognitive phases during the time analyzed. This is most evident from the chi-square analysis comparing the combination of the first three cognitive phases to the last three cognitive phases between the first two time phases and the last two time phase. There was a statistically significant difference between the proportionality of the codes used when comparing these groupings of time and cognitive phase.

THIS PAGE INTENTIONALLY LEFT BLANK

#### VI. RECOMMENDATIONS FOR FUTURE RESEARCH

#### A. CODE ALL OF THE RELEVANT CHANNELS

Because each channel only represents a small portion of the entire team effort of NEADS on September 11, 2001 it would be useful to transcribe and code all of the relevant channels. Once the relevant channels are transcribed, some audio software could be used to align the channels in order to determine what each team member was doing at any given moment, how long it took the team to reach a shared mental model and how efficiently and accurately information was being presented to the key decision makers and how quickly decision makers acted on the information.

As part of a thesis that includes an analysis of the relavent audio channels, the writer could include some of the calculations called for when using the codes, recognition of expertise and building common ground.

#### B. STANDARD OPERATING PROCEDURE

The standard operating procedure (SOP) for NORAD/NEADS is classified and therefore not useful for this thesis. However, it would be of benefit for someone to acquire the NORAD/NEADS SOP and write a classified thesis that examines how well the team followed their own SOP, find any occurrences of when they did not follow SOP, and how and when they were forced to work outside of SOP because of the uniqueness of the situation. NORAD/NEADS may have already modified their SOP to deal with more dynamic types of situations; however a close examination of the relevant channels could reveal some good suggestions for inclusion in the NORAD/NEADS SOP.

THIS PAGE INTENTIONALLY LEFT BLANK

# APPENDIX A: EXAMPLES OF MACROCOGNITIVE PROCESSES IN THE STRUCTURAL MODEL OF TEAM COLLABORATION USED BY NEADS ON CHANNEL 2

Table 14. Macroognitive Process Codes: Examples From Channel 2 Transcript.

	Macrocognitive Process Codes and Examples						
	IIC: Iterative Information Collection						
	"We were checking to get some information from you if I could."						
1.	"Ok what would you what do you need?"						
	"We need callsign type aircraft."						
	ITK: Individual Task Knowledge Development						
	"Hey, I'm getting reports from my TRACON there might be a possible hijacking."						
2.	"I'm just hearing the same thing. We're working it right now."						
	"Ahh you want the type and stuff, what do you mean?"						
	"Yeah, Like passengers on board, where it came"						
	IMM: Individual Mental Model Development						
3.	"We do have a tail number."						
Э.	"That might be the fifth airplane."						
	"Right there. He's gone. I don't see him. Wait a minute."						
	PRTA: Pattern Recognition and Trend Analysis						
	<ul> <li>"767. 200 series. No idea how many people on board right now. They came from Boston; they're supposed to be going to LA. And they're headed south. They're going the wrong way, obviously."</li> </ul>						
4.	<ul> <li>"Mode 3 1443. Last known. No, this is real world. Okay were in the high check. Sir, last know position that we got out of this guy was right there at the V point. He's heading 190 at 29,000 feet. He's heading down. So we're looking for somebody – you know what just start hitting up tracks all around that area that V point. Okay. Just north of ahh there."</li> </ul>						
	TMM: Team Mental Model Development						
5.	"Can you pick call signs? They're gonna give them priority – I've got amplifying data up here, I can write it all down. I got to get off the position."						
	"290 is supposed to be going to LA says they're going to New York."						

	<ul> <li>"True, and probably right now with what's going on in the cockpit is probably really crazy, so they need us to – that will simmer down, and we can probably get some better information. I've scramble OTIS already for your direct. We're sending them in that general direction. We're sending them right to that V point, and then we can maneuver them as deemed right. We'll work with them, make sure weapons works with them. We're hitting up a 25 mile radius getting what we can get out of there."</li> </ul>
	SUK: Sharing Unique Knowledge
6.	<ul> <li>"We just did a 25 mile track area, track production area where we're just beating that whole area up."</li> </ul>
0.	<ul> <li>"I was talking with IG we got a phone call that came down to us saying that they had a possible hijack out of Boston."</li> </ul>
	<ul> <li>"They're still under FA control. We never gonna take them."</li> </ul>
	UR: Uncertainty Resolution
	<ul> <li>"Confirmed – Boston Center has confirmed that was the aircraft. American Airlines hit the World Trade Center. No, and aircraft."</li> </ul>
7.	<ul> <li>"I never heard them say American Airlines hit the World Trade Center."</li> </ul>
, ·	<ul> <li>"Okay. Boston just talked to us, just called up, and they said, he doesn't want to confirm this or not, but they're pretty sure that that is – that was the aircraft. Unconfirmed from Boston. Yeah, they're pretty doggone sure it is him. Yep. I think we put the emphasis on the hold. What do you think? Is Conar coming up with the same thing?"</li> </ul>
	KI: Knowledge Interoperability
	<ul> <li>"Conar has been trying it though. The second suspected aircraft is United 175."</li> </ul>
8.	<ul> <li>"Roger. I'm not telling them anything other than the fact that I just want"</li> </ul>
	"Get them to the airspace."
	" and this is what we're expecting."
	VRM: Visualization and Representation of Meaning
	<ul> <li>"This is the lat long their showing them at."</li> </ul>
9.	<ul> <li>"Can you point – can you point in or something for us."</li> </ul>
	<ul><li>"That's what were seeing right now."</li></ul>
	"At this time – They're paired right there."
	KT: Knowledge Transfer
10.	<ul> <li>"That determination hasn't been made yet. Let me, if you could just hold on a moment, I'm going to get we've got some coordination going on right now. I think they said they are going to put OTIS on battle stations. That's</li> </ul>

why I would anticipate the aircraft to be based on going to JFK they would be our closest asset." "Mode 3 1443. Last known. No, this is real world. Okay were in the high check. Sir, last know position that we got out of this guy was right there at the V point. He's heading 190 at 29,000 feet. He's heading down. So we're looking for somebody – you know what just start hitting up tracks all around that area that V point. Okay. Just north of ahh there." "Okay. So if we can find it, we'll intercept it. Okay. Now, you said something hit the World Trade Center or something reports. Okay. Okay. Okay. No, keep on going with it." TSU: Team Shared Understanding "Can't do a God damn thing about it either. Okay. Guys I need some - I need no shit one tracker coming out of Boston that whole area. Anybody and I need another tracker just around this whole area of Manhattan." 11. "Okay. What I've also done is that I have trackers over Boston, JFK and in between there, and we're gonna try to pick up anything that we can." • "Go low, turn the squawks off and then do their runs." CT: Critical Thinking "We need to be more effective at something and stick them-" "Okay. Well, we can't they're in the FAA airspace. Well, we can – yeah, they're ours. Yeah, they're mine. Okay." 12. "You know what? I don't like them there." "It's flying low." "505 airborne. I through them in there originally for a pivotal point. Good move. Move them down there. That's what I'm getting." MS: Mental Simulation "Are you good with that? What – wait – don't put that in there. okay. Do we have a mission that we can pass to these guys? No, what they want to know is what kind of mission we passed to them hold. Do you see what I mean? Yeah, FAA as needed, and also we're going to be – we worked out with FAA we're gonna hold them south of the JFK for approximately 10 miles without any altitude that they can hold these guys at. We also have main 85 whiskey 105. We can be used for this. We can scramble it, and 13. we got this guy. Yeah. Okay. Bye. Okay. Tag them up. You good with that?" "Okay. Foxxy, plug in. Okay. Foxxy, this is what I foresee what we probably need to do. We need to talk to FAA. We need to tell them if this stuff's gonna keep on going. We need to take those fighters, put them over Manhattan. Okay. That's the best thing. That's the best play right now. So coordinate with the FAA, tell them if there's more out there which we

don't know, let's get them over Manhattan at least we got some kind of

	play. Hold on"
	<ul> <li>"What we're gonna have to do is talk to the commander there. He's gonna have authority of that. I'll work the deal. Yeah, Colonel Mar, he might need to call up the Toledo guy. Okay. Yeah."</li> </ul>
14.	IDM: Intuitive Decision Making
14.	Was not used for channel 2 transcript
	IIC2: Iterative Information Collection 2
45	<ul><li>"Standby. What was the airborne time?"</li></ul>
15.	• "52"
	"How big are these planes?"
	ITK2: Individual Task Knowledge Development 2
	<ul> <li>"Do you care what altitude they go to Baltimore at just get down there?"</li> </ul>
16.	<ul> <li>"Just as long as they get there."</li> </ul>
	<ul><li>"And they're just gonna hold over Baltimore?"</li></ul>
	"For right now, ma'am. Yes."
	SOG: Solution Option Generation
17.	• "Okay. Talk to the guys from Suffolk. Those are the guys shits down there. FAA. Yeah, Boston Center or Boston has this shut down by Boston Airport, and anything that's in the air, they're diverting out. I've been talking with Mr. Scoggins there from Boston center. He just wanted to know if we had any aircraft. I told him about the aircraft in the area that we have our fighters. Our fighters in the area, tankers and also – okay. Also we're in close contact, so If he sees anything squirrelly he's gonna give us a yell, and we're gonna press. Yeah. Battle Stations are sitting in the down stations right now. Two tankers from McGuire KC10s full, and I got 60,000 offload for the Main 85. Okay. We probably won't need them, but just status them anyway. What the hell? More the merrier. Yes, sir. The 15s are 0 by 2 by gun. My recommendation if we have to take anybody out large aircraft we use A9s in the face. Yes, 8B. No, but he just said I need what assets I have. And that's my recommendation is from earlier tests. Okay. He has guys going out to the 105. OTIS soft has recalled all it's pilots for possible use, so we got more aircrafts on standby. Yeah, what – what they're looking for is pilots I guess. So the recalled all their pilots as best as they can get. Right. Recall all their pilots?"
	<ul> <li>"Sure. You can have Alpha through Foxtrot, is that enough? Is that where you want to put him or"</li> </ul>
	<ul> <li>"Is it all right if Center talks to them the whole way to Baltimore? Is he gonna hold over Baltimore like"</li> </ul>
18.	S: Storyboarding

	Was not used for channel 2 transcript
	Was not used for channel 2 transcript  TPR1: Team Pattern Recognition 1
19.	Was not used for channel 2 transcript
	TNSA: Team Negotiation of Solution Alternatives
20.	<ul> <li>"Okay. What I would like to do if I could possibly steal some aircraft out of cargo from you guys if need be."</li> </ul>
	<ul><li>"Okay. You want us to bring two up at Fargo?"</li></ul>
	"Yeah, would you please."
	TMM2: Team Mental Model Development 2
	<ul><li>"Okay. What else do we got here. Junabi, what do you got?"</li></ul>
	"We're inbound on them. "
21.	<ul><li>"I think they're dong the area, aren't they?"</li></ul>
	"Yeah, they're doing the area."
	<ul> <li>"Holy shit. All right. Who else we got? And Jeff's doing – Jeff's watching where? Cleveland or he's watching LS?"</li> </ul>
	"Yeah, he's watching the area."
	FI: Feedback Interpretation
	<ul> <li>"They're not gonna let them hold over New York City."</li> </ul>
	<ul> <li>"They might. They still want them to go."</li> </ul>
22.	<ul> <li>"Do you want him in AR track or just orbiting in"</li> </ul>
22.	<ul><li> "Do you want him in AR track or just orbiting in"</li><li> "We need them to get down to Whiskey 386."</li></ul>
22.	
22.	"We need them to get down to Whiskey 386."
22.	<ul> <li>"We need them to get down to Whiskey 386."</li> <li>"You don't care where just in 386?"</li> <li>"Just enter 386, kick them over to our frequency, and we'll take care of</li> </ul>
23.	<ul> <li>"We need them to get down to Whiskey 386."</li> <li>"You don't care where just in 386?"</li> <li>"Just enter 386, kick them over to our frequency, and we'll take care of them after that."</li> </ul>
	<ul> <li>"We need them to get down to Whiskey 386."</li> <li>"You don't care where just in 386?"</li> <li>"Just enter 386, kick them over to our frequency, and we'll take care of them after that."</li> <li>R: Replanning</li> <li>"Just have him contact us on the auxiliary frequency 234.6. We just need – instead of taking handoff to us and then us handing him back. Just tell</li> </ul>
	<ul> <li>"We need them to get down to Whiskey 386."</li> <li>"You don't care where just in 386?"</li> <li>"Just enter 386, kick them over to our frequency, and we'll take care of them after that."</li> <li>R: Replanning</li> <li>"Just have him contact us on the auxiliary frequency 234.6. We just need – instead of taking handoff to us and then us handing him back. Just tell Center that they've got to go to Baltimore."</li> <li>"We're gonna turn him and crank it up. Here we go. This is what we're</li> </ul>
	<ul> <li>"We need them to get down to Whiskey 386."</li> <li>"You don't care where just in 386?"</li> <li>"Just enter 386, kick them over to our frequency, and we'll take care of them after that."</li> <li>R: Replanning</li> <li>"Just have him contact us on the auxiliary frequency 234.6. We just need – instead of taking handoff to us and then us handing him back. Just tell Center that they've got to go to Baltimore."</li> <li>"We're gonna turn him and crank it up. Here we go. This is what we're gonna do here."</li> </ul>

	RTA: Request Take Action
	"Quit 25 huntress confirm squawking 7777."
25.	<ul> <li>"Calm down. I think he's – you might want to contact Bill. He said that he got stepped on and trying to work on Suffrage. Talking about Suffrage, did anybody get in contact with them yet? Good. They're mine."</li> </ul>
	"FB pick up your hotline."
	COA: Course of Action
26.	<ul> <li>"For your ICCs? Well, I'm gonna try to get an E3 over Chicago because I got no radar and no radios over that airspace, so work them. You know what? Call them. Call Pinker right now. Call command posts and if need be I'll talk to the guy."</li> </ul>
	<ul> <li>"This guy right here. We need fighters on this guy right there."</li> </ul>
	"Get those three and get some more aircrafts available out of OTIS."
	MISC: Miscellaneous
27	"Can you see if this is up to snuff"
27.	"The person at extension 4747347"
	"Let me transfer you to the front desk."
	NC: Not Codeable
20	"Really quickly"
28.	"Man, I got to pee."
	• "Team 21"

### APPENDIX B: COGNITIVE PROCESS CODE OCCURRENCES, AND PERCENTAGES WITH MISC AND NC.

Code	Cognitive Process	Number	Percentage				
Individual Knowledge Building							
IIC	Iterative Information Collection	0.05					
ITK	Individual Task Knowledge Development	323	11.96				
IMM	Individual Mental Model Development	38	1.41				
	Team Knowledge Building						
PRTA	Pattern Recognition and Trend Analysis	2	0.01				
TMM	Team Mental Model Development	38	1.41				
SUK	Sharing Unique Knowledge	133	4.93				
UR	Uncertainty Resolution	23	0.85				
KI	Knowledge Interoperability	28	1.04				
	Developing Shared Problem Concepts	ualization					
VRM	RM Visualization and Representation of Meaning		6.67				
KT	Knowledge Transfer	75	2.78				
TSU	Team Shared Understanding	245	9.07				
	Team Consensus Developmen	nt					
СТ	Critical Thinking	5	0.19				
MS	Mental Simulation	13	0.48				
IDM	Intuitive Decision Making	0	0.00				
IIC2	Iterative Information Collection 2	3	<.01				
ITK2	Individual Task Knowledge Development 2	506	18.74				
SOG	Solution Option Generation	35	1.30				
S	Storyboarding	0	0.00				
TPR	Team Pattern Recognition	0	0.00				
TNSA	Team Negotiation of Solution Alternatives	29	1.07				
TMM2	Team Mental Model Development 2	42	1.56				

Outcome Appraisal							
FI	Feedback Interpretation	30	1.11				
R	Replanning	10	0.37				
TPR2	Team Pattern Recognition 2	0	0.00				
	Taking Actions						
RTA	Request Take Action	164	6.07				
COA	Course of Action	73	2.70				
MISC	Miscellaneous	500	18.52				
NC	Not Codeable	192	7.11				
Total		2700					

## APPENDIX C: OBSERVED DATA USED TO CALCULATE CHI SQUARE VALUES

Table 15. Observed Values For Chi Square Data Sub-Set 1

Code Number	1	2	3	4	5	6	7
Cognitve Code	IIC	ITK	IMM	PRTA	TMM	SUK	UR
Time Pase 1	12	49	2	2	5	5	0
Time Pase 2	1	243	2	0	27	45	12
Time Pase 3	0	22	4	0	5	28	1
Time Pase 4	0	10	7	0	0	54	10
Total	13	324	15	2	37	132	23

Code Number	8	9	10	11	12	13	14
Cognitive Code	KI	VRM	KT	TSU	СТ	MS	IDM
Time Pase 1	1	7	4	0	0	0	0
Time Pase 2	5	28	15	20	5	4	0
Time Pase 3	0	51	13	69	0	5	0
Time Pase 4	22	93	45	161	0	4	0
Total	28	179	77	250	5	13	0

Code Number	15	16	17	18	19	20	21
Cognitive Code	IIC2	SOG	S	TRP1	TNSA	ITK2	TMM2
Time Pase 1	0	0	0	0	0	0	0
Time Pase 2	3	15	0	0	1	16	7
Time Pase 3	0	7	0	0	0	121	5
Time Pase 4	0	13	0	0	25	392	30
Total	3	35	0	0	26	529	42

Code Number	22	23	24	25	26
Cognitive Code	FI	R	TPR2	RTA	COA
Time Pase 1	0	0	0	15	6
Time Pase 2	13	5	0	48	35
Time Pase 3	2	0	0	23	13
Time Pase 4	15	5	0	76	19
Total	30	10	0	162	73

Observed Values For Chi Square Data Sub-Set 2 for Time Table 16. Phase 1 vs. 2-4

							1
Code Number	1	2	3	4	5	6	7
Cognitive Code	IIC	ITK	IMM	PRTA	TMM	SUK	UR
Time Phase 1	12	49	2	2	5	5	0
Time Pase 2-4	14	599	28	2	69	259	46
	26	648	30	4	74	264	46
Code Number	8	9	10	11	12	13	14
Cognitive Code	KI	VRM	KT	TSU	СТ	MS	IDM
Time Phase 1	1	7	4	0	0	0	0
Time Pase 2-4	26	648	30	4	74	264	46
Code Number	15	16	17	18	19	20	21
Cognitive Code	IIC2	SOG	S	TPR1	TNSA	ITK2	TMM2
Time Phase 1	0	0	0	0	0	0	0
Time Pase 2-4	9	16	14	11	12	13	14
Code Number	22	23	24	25	26		
Cognitive Code	FI	R	TPR2	RTA	COA		
Time Phase 1	0	0	0	15	6		
Time Pase 2-4	15	16	17	18	19		

Table 17. Observed Values For Chi Square Data Sub-Set 2 for Time Phase 2 vs. 1 and 3-4

_				,			
Code Number	1	2	3	4	5	6	7
Cognitive Code	IIC	ITK	IMM	PRTA	TMM	SUK	UR
Time Phase 2	1	243	2	0	27	45	12
Time Pase 1 and 3-4	0	0	0	0	0	0	0
Code Number	8	9	10	11	12	13	14
Cognitive Code	KI	VRM	KT	TSU	CT	MS	IDM
Time Phase 2	5	28	15	20	5	4	0
Time Pase 1 and 3-4	1	243	2	0	27	45	12
Code Number	15	16	17	18	19	20	21
Cognitive Code	IIC2	SOG	S	TPR1	TNSA	ITK2	TMM2
Time Phase 2	3	15	0	0	1	16	7
Time Pase 1 and 3-4	13	37	25	31	17	17	14
Code Number	22	23	24	25	26		
Cognitive Code	FI	R	TPR2	RTA	COA		

Time Phase 2

Time Pase 1 and 3-4

Observed Values For Chi Square Data Sub-Set 2 for Time Phase 3 vs. 1-2 and 4 Table 18.

			•				
Code Number	1	2	3	4	5	6	7
Cognitive Code	IIC	ITK	IMM	PRTA	TMM	SUK	UR
Time Phase 2	0	22	4	0	5	28	1
Time Pase 1 and 3-4	26	626	26	4	69	236	45
Code Number	8	9	10	11	12	13	14
Cognitive Code	KI	VRM	KT	TSU	СТ	MS	IDM
Time Phase 2	0	51	13	69	0	5	0
Time Pase 1 and 3-4	1	24	7	4	10	34	8
Code Number	15	16	17	18	19	20	21
Cognitive Code	IIC2	SOG	S	TPR1	TNSA	ITK2	TMM2
Time Phase 2	0	7	0	0	0	121	5
Time Pase 1 and 3-4	8	60	23	80	12	18	14
Code Number	22	23	24	25	26		
Cognitive Code	FI	R	TPR2	RTA	COA		
Time Phase 2	2	0	0	23	13		
Time Pase 1 and 3-4	15	23	17	18	19		

Table 19. Observed Values For Chi Square Data Sub-Set 2 for Time Phase 4 vs. 1-3

Code Number	1	2	3	4	5	6	7
Cognitive Code	IIC	ITK	IMM	PRTA	TMM	SUK	UR
Time Phase 2	0	10	7	0	0	54	10
Time Pase 1 and 3-4	13	324	15	2	37	132	23
Code Number	8	9	10	11	12	13	14
Cognitive Code	KI	VRM	KT	TSU	CT	MS	IDM
Time Phase 2	22	93	45	161	0	4	0
Time Pase 1 and 3-4	1	12	10	4	5	60	17
Code Number	15	16	17	18	19	20	21
Cognitive Code	IIC2	SOG	S	TPR1	TNSA	ITK2	TMM2
Time Phase 2	0	13	0	0	25	392	30
Time Pase 1 and 3-4	30	102	55	172	12	17	14
						-	
Code Number	22	23	24	25	26		
Cognitive Code	FI	R	TPR2	RTA	COA		
Time Phase 2	15	5	0	76	19		
Time Pase 1 and 3-4	15	29	17	18	44		
						_	

Table 20. Observed Values For Chi Square Data Sub-Set 3 for Macrocognitive Categories 1-3 and 4-6 vs. Time Phase 1-2 and 3-4

		Time Phase		
		1 and 2	3 and 4	
Cognitive	1, 2 and 3	485	592	
Phase	4, 5 and 6	173	758	

THIS PAGE INTENTIONALLY LEFT BLANK

### APPENDIX D: NORAD TRANSCRIPTS FROM CHANNEL 2

Table 21. Complete Channel 2 Transcript with Final Cognitive Process Codes

1	Sergeant M:	Major N, your need in ops pronto. Major N, your need in ops pronto. North East Air Defense Sector, how can I help you?	
2	Sergeant K:	Hey, Sergeant K from Otis, how you doing today?	MISC
3	Sergeant M:	Yeah, go ahead.	MISC
4	Sergeant K:	Hey, I'm getting reports from my TRACON there might be a possible hijacking.	ITK
5	Sergeant M:	I'm just hearing the same thing. We're working it right now.	ITK
6	Sergeant K:	Okay. Thanks.	MISC
7	Sergeant M:	Yep. Bye. Can I get an MCC here?	RTA
8	Speaker 2:	Sir. Sir. Yeah, I got a MCC coming in to talk to you to handle all this.	ITK
9	Foxxy:	You called N right?	IIC
10	Huntress:	Yeah, Huntress, calling in reference to the hijacked aircraft.	MISC
11	Speaker 3:	Yeah.	MISC
12	Huntress:	We were checking to get some information from you if I could.	IIC
13	Speaker 3:	Ok what would you what do you need?	IIC
14	Huntress:	We need callsign type aircraft.	IIC
15	Major N:	American 11.	IIC
16	Huntress:	American 11.	ITK
17	Major N:	Yeah.	ITK
18	Major J:	High this is Major J can I help you?	MISC
19	J. C. :	Hi J. C. from, and there's a hijack in progress.	IMM
20	Major J:	Do you have a mode 3 on it.	IIC
21	J. C.	No it's a primary target only.	IIC
22	Female Speakers:		MISC
23	Speaker 3:	Where's New York?	ITK
24	Female Speakers:	We're the only ones seeing it.	SUK

25	Major N:	Okay.	MISC
26	Female Speaker:	We're thinking he wants to go into JFK.	IMM
27	Male Speaker	Okay. Where is he?	ITK
28	Female Speakers:	·	NC
29	Male Speaker	No get me the track number. Hit it up on something.	RTA
30	Major J:	190	IIC
31	J. C.	387 knots	IIC
32	Major J:	387 knots.	IIC
33	J. C.	The last known altitude was flight level 290 but we cannot confirm that.	IIC
34	Major J:	290. Do you have time to give me any other amplifying information on it?	IIC, IIC
35	J. C.	Ahh you want the type and stuff, what do you mean?	ITK, ITK
36	Major J:	Yeah, Like passengers on board, where it came from?	ITK, ITK
37	J. C.	767. 200 series. No idea how many people on board right now. They came from Boston; they're supposed to be going to LA. And they're headed south. They're going the wrong way, obviously.	
38	Major J:	Okay. Okay. Thank you very much.	MISC
39	J. C.	Where are they coming who are you going to send, do you know?	ITK
40	Major J:	That determination hasn't been made yet. Let me, if you could just hold on a moment, I'm going to get we've got some coordination going on right now. I think they said they are going to put OTIS on battle stations. That's why I would anticipate the aircraft to be based on going to JFK they would be our closest asset.	
41	J. C.	Okay. Let me give you my commercial number in case we get disconnected here.	MISC
42	Major J:	Okay.	MISC
43	J. C.	603	MISC
44	Major J:	603	MISC
45	J. C.	879	MISC
46	Major J:	879	MISC

47	J. C.	6666	MISC
48	Major J:	66 – that's a scary number. 6666. And your number again, sir. Joe?	MISC
49	J. C.	J. C	MISC
50	Major J:	Cooper.	ITK
51	J. C.	You can talk to anyone here. Everybody knows what's going on.	ITK
52	Major J:	Ok	IKT
53	J. C.	All right. So I'll stay on hold and give me the call signs at least so we can give them priority to get them going.	
54	Major J:	Oh, okay. Standby.	ITK
55	Sergeant M:	John, we got OTIS on battle stations.	SUK
56	Female Speakers:	Can you pick call signs? They're gonna give them priority – I've got amplifying data up here, I can write it all down. I got to get off the position.	
57	Sergeant M:	1241 battle stations.	COA
58	Sergeant M:	Got to get a mode 3. That's gonna help us out big time. No, ma'am.	RTA
59	Sergeant M:	Can't recall it.	NC
60	Male Speaker background:	52	NC
61	Sergeant M:	52 and – okay. What we're looking at right now is we need to make sure that inland 55, 56 and 62 stay up and are good to go.	
62	Femal Speaker 3 background:	Call commercial.	NC
63	Sergeant M:	Uh-huh.	NC
64	Sergeant M:	l've never seen so much real world stuff happening during an exercise.	MISC
65	Femal Speaker 3 Background:	This is the lat long their showing them at.	VRM
66	Sergeant M:	Speed?	ITK
67	Sergeant M:	Lat/long 41	ITK
68	Speaker 5:		NC
69	Sergeant M:	Right.	ITK
70	Speaker 5:	73	NC
71	Sergeant M:	What was that?	ITK

72	Speaker 6 background:	290 is supposed to be going to LA says they're going to New York.	TMM
73	Sergeant M:	Okay. Let's find this guy.	RTA
74	Sergeant M:	Yeah, 41 – remember we're putting it in.	ITK
75	Speaker 5:	1443	ITK
76	Sergeant M:	1443 look for it.	RTA
77	Speaker 5:	I just put the v point for it.	ITK
78	Sergeant M:	Right there. Okay.	ITK
79	Sergeant M:	Mode 3 1443. Last known. No, this is real world. Okay were in the high check. Sir, last know position that we got out of this guy was right there at the V point. He's heading 190 at 29,000 feet. He's heading down. So we're looking for somebody — you know what just start hitting up tracks all around that area that V point. Okay. Just north of ahh there.	RTA
80	Sergeant M:	FDMC please scramble Otis	COA
81	Sergeant M:	Copy same mission.	ITK
82	Male Speaker	MCC I don't know where I'm scrambling these guys to. I need a direction, a destination.	
83	Sergeant M:	Okay I'm gonna give you V point.	ITK
84	Sergeant M:	It's just north of New York City.	ITK
85	Male Speaker:	I got this Lat/Long 4115:7436 or 7346.	ITK
86	Sergeant M:	Head them in that direction.	COA
87	Male Speaker:	Copy that.	MISC
88	Sergeant M:	It doesn't matter.	NC
89	speaker background	They're not talking.	NC
90	Sergeant M:	We're gonna need a 29 –	NC
91	Male Speaker	Boston and New York aren't talking huh?	SUK
92	Sergeant M:	Hold off. Hold on. Hang on.	MISC
93	Speaker 1:	We're gonna get priority so.	NC
94	Sergeant M:	All right.	NC
95	Sergeant M:	He's not squawking. Yeah, nothing. Do it again? 1443.	VRM, RTA
96	Major N	Have you guys gotten any of the information on this yet?	ITK

97	Speaker 1:	Only thing we know is it's American Airlines supposed to be going into LAX	ITK
98	Sergeant M:	Say again.	MISC
99	Speaker 1:		NC
100	Sergeant M:	Okay. I can probably – let me just. Who's got it? Hi, sir. Okay. What we're doing, we're trying to locate this guy. We can find him via IFF what we're gonna do. We're gonna hit up every track within a 25 miles radius of this V point that we put on the scope. 29,000 heading 190, we're gonna try to find this guy. They can't find him and supposedly there's threats in the cockpit, so we're just ah were doing the thing.	KT, SUK, MISC, TMM (OVERALL)
101	Major N	·	NC
102	Sergeant M:	True, and probably right now with what's going on in the cockpit is probably really crazy, so they need us to – that will simmer down, and we can probably get some better information. I've scramble OTIS already for your direct. We're sending them in that general direction. We're sending them right to that V point, and then we can maneuver them as deemed right. We'll work with them, make sure weapons works with them. We're hitting up a 25 mile radius getting what we can get out of there.	
103	Major N	Are we in contact with –	NC
104	Speaker 1:	46, 15 miles east of kenedy	NC
105	Male Speaker background:	46 сору	NC
106	Sergeant M:	ID 46 scramble.	COA
107	Major N:	Right there.	VRM
108	Speaker 1:	Yeah, 300 knots roughly.	ITK
109	Sergeant M:	at 46 scramble.	ITK
110	Major N	NEADS MCC Go	MISC
111	sergeant xxx	Hey, Sir this is sergeant xxx at Conar.	MISC
112	sergeant xxx	The general would like – do you have radar coverage on this guy?	ITK
113	Major N	We are picking them up – we've think we've picked them up right now. In search only track, he's approximately 20 –	

114	sergeant xxx	Can you point – can you point in or something for us.	RTA, VRM
115	Major N	We are getting ready to do that right now.	RTA
116	sergeant xxx	Great.	MISC
117	Major N	We're getting ready to do it	ITK
118	Speaker 11:	Yeah, I understand.	MISC
119	Major N	We just did a 25 mile track area, track production area where we're just beating that whole area up.	
120	sergeant xxx	Right.	MISC
121	Major N	Were doing the best that we can.	MISC
122	sergeant xxx	So I can be looking forward to it on our screen momentarily?	ITK, VRM
123	Major N	It's in and out and in and out, so we can't give a good warm feely on that.	ITK
124	sergeant xxx	Right. Copy that, sir. Thanks a lot, appreciate it.	MIS
125	Major N	Okay. Yeah, that's Conar.	MISC
126	Speaker 1:	That's what were seeing right now.	VRM
127	Major N	Yeah, but this – I don't think it's anything. How about that guy right there?	VRM, ITK
128	Male Speaker:	Roger that. III do what we can.	MISC
129	Major N	Yes.	MISC
130	Speaker 1:	Are they airborne?	ITK
131	Major N	Yes, 46.	ITK
132	Speaker 1:	Somebody?	NC
133	Major N	Got it. Let's kick this down just a hair. Scramble that 46, excuse me.	RTA, COA
134	Speaker 1:	46 or airborne 46?	ITK
135	Major N	SD, MCC. 046 scramble time. 46 scramble time.	ITK
136	Speaker 1:	American Airlines 11.	MISC
137	Major N	11. Yes, sir?	MISC

138	Major N	Nope, not yet. We're still trying to – we think we might have them just east of New York, but it's – no. Nope. We're just – we got American Airlines. It's 767. American Airlines 11. Yes, American Airlines 11. Okay. And we just got a call from Conar – well can you put it in we haven't found them yet, so I already told them that. So if you want to, you can do that.	
139	Speaker background:	15 miles due east of JFK.	NC
140	Major N:	Are you good with that?	ITK
141	Major N	Yep.	MISC
142	Speaker 1:	All right.	MISC
143	Speaker background:	The last position I got from Boston was 15 miles east of JFK. Okay.	NC
144	Female Speaker background:	That last one was 4039:740 – haven't given us another update.	NC
145	Major N	You know what – don't talk to them. Tell them to talk to me. No, just tell them to call me at the MCC position, 6311.	
146	Major N	Okay. So if we can find it, we'll intercept it. Okay. Now, you said something hit the World Trade Center or something reports. Okay. Okay. Okay. No, keep on going with it.	RTA
147	Speaker 13:	I was talking with IG we got a phone call that came down to us saying that they had a possible hijack out of Boston.	
148	Major N	Alright	MISC
149	Speaker 13:	And I just flipped around and we were just we always monitor the news. And a 737 hit the World Trade Center, and I was just curious at the same time if that was the aircraft?	·
150	Speaker 13:	Last I knew they had a primary on it and the tracking was not squawking 7500,	ITK
151	Major N	could be it	ITK
152	speaker 13:	but it was under duress.	ITK
153	Major N	Send them to New York City still? Continue a go.	ITK
154	Speaker:	Sir, hold on.	MISC
155	Major N	Okay. Who's plugged in up there?	NC

156	Speaker 3:	Me.	NC
157	Major N	Plug in.	NC
158	Speaker 13:	I'm gonna have to have you hold on for a minute.	NC
159	Major N	Okay. This is what I got so far.	NC
160	Speaker 13:	Okay.	NC
161	Major N	Okay. This is what we – okay. Now, we do, this is what I got. Possible news of a 737 just hit the World Trade Center. This is the real world, and we're trying to confirm this. Okay. continue taking the fighters down to the New York City area, JFK area the best that you can, make sure the FAA clears your route all the way through. Let's do what we got to do, okay? Just press with us – it looks like this guy could have hit the World Trade Center.	TMM
162	Speaker:	Okay. Until we're confirmed it's gonna be a lot easier for me to get down to this area to bring them out like this rather than through all this traffic. Until that's confirmed do you want me to bring them down this way?	
163	Major N	Yeah, work with FAA just tell them clear you a route, clear you a route.	RTA
164	speaker:	Yes sir.	MISC
165	Speaker 13:	52 airborne?.	ITK
166	Major N	52 airborne.	ITK
167	Speaker 13:	Thank you, sir.	MISC
168	Speaker	He was calling with the airborne stuff.	MISC
169	Major N:	Sure. I just need to see far out for that.	NC
170	Speaker 12:	No, they've got all that stuff back there.	NC
171	Major N	They say he just crashed into the World Trade Center. That was the last call.	UR
172	Speaker 12:	Right there.	MISC
173	Major N	Alright this is what I want. That's what supposedly done it.	ITK
174	Speaker 12:	That's what was going in.	NC

175	Major N	Okay. All right. Our last actual reported position if he didn't crash into the World Trade Center was 20 miles south of JFK. So I want you take them down into this area. Put them in the hold as needed, whatever altitude they need to go for center to make this work it's fine with me, but that's the area I went them to go and hold right in that little gap there. That last view point making sure FA clears out a route. All right. this is what we're doing. We're taking them down into this area.	
176	Female Speakers:		MISC
177	Major N	At hold for now. Whatever altitude center needs for them to do that is fine.	ITK
178	Speaker 13:	So you want me to have them hold.	ITK
179	Major N	The thing is that their weapons stay inactive.	COA
180	Major N	The fighters should be talking center. They're gonna pass that through the fighters exactly what we want them to do. No.	
181	Speaker 1:	I left a message with?	NC
182	Major N	No, no, no. Because if he's still airborne – okay. If you can hand the fighter over directly to FA, so they can –	
183	Speaker 1:	They're still under FA control. We never gonna take them.	SUK
184	Major N	Work with them, coordinate with them as best that you can with that, take to that area, and let them handle that air space. Okay. Another heads up.	COA
185	Speaker 10:	They're not gonna let them hold over New York City.	FI
186	Major N	They might. They still want them to go.	FI
187	Speaker 10:	Confirmed.	MISC
188	Major N	Confirmed – Boston Center has confirmed that was the aircraft. American Airlines hit the World Trade Center. No, and aircraft.	
189	Speaker 13:	I never heard them say American Airlines hit the World Trade Center.	UR
190	Major N	Okay. Both here – okay. So what did they say about that aircraft that hit the building, the World Trade Center.	ITK, UR
191	Speaker 10:	That's –	NC

192	Major N	Okay. Boston just talked to us, just called up, and they said, he doesn't want to confirm this or not, but they're pretty sure that that is — that was the aircraft. Unconfirmed from Boston. Yeah, they're pretty doggone sure it is him. Yep. I think we put the emphasis on the hold. What do you think? Is Conar coming up with the same thing?	
193	Speaker 10:	Yes.	UR
194	Major N	It's possible. This is – that was the possible aircraft, the hijack aircraft.	UR
195	Speaker 10:	Is he airborne?	ITK
196	Major N	Did you get the tail number, Foxxy?	ITK
197	Foxxy:	Standby. What was the airborne time?	IIC2
198	Speaker:	52	IIC2
199	Major N	Did you get the tail number? Okay. Good. Can they give us a mission?	ITK, ITK
200	Speaker:	Right now the mission is hold that's all that we have.	ITK
201	Major N	Okay. I'm –	MISC
202	Speaker 13:	They got them basically just coming just south of Long Island and holding at whatever altitude Center wants to put them at.	
203	Major N	Right. Okay.	MISC
204	Speaker 13:	Other that.	MISC
205	Major N	Are you good with that? What – wait – don't put that in there. okay. Do we have a mission that we can pass to these guys? No, what they want to know is what kind of mission we passed to them hold. Do you see what I mean? Yeah, FAA as needed, and also we're going to be – we worked out with FAA we're gonna hold them south of the JFK for approximately 10 miles without any altitude that they can hold these guys at. We also have – main 85 whiskey 105. We can be used for this. We can scramble it, and we got this guy. Yeah. Okay. Bye. Okay. Tag them up. You good with that?	TMM, MS
206	Major N	Main 85 and whiskey 105 called giant killer get a code.	COA

207	Major N	Yeah. Calling American Airlines for souls on ah and where was I? I was on the shitter. I heard this, "Oh my God."	
208	Speaker 4:	Get your ass in here pronto.	MISC
209	Major N	I knew that was an exercise. Okay. Tell me what you have. Tell me what you have.	MISC, RTA
210	Speaker 2:	We've got	NC
211	Major N	Hey, is that the Delta out there?	ITK
212	Female Speakers:	They're flying the Delta –	ITK
213	Major N	The Delta's up there, 53. Okay.	ITK
214	Speaker 1:	That's not what they told me, so sorry. Where are they going this way?	ITK
215	Major N	Just across this way FA. They get them and stuff. No, not yet. No, not yet. We'll get to that.	
216	Speaker 1:	What I want you to do is start calling the squadrons out at McGuire –	COA
217	Major N	FA FCC.	MISC
218	Speaker 1:	See if they got anybody airborne, and I'm looking for anybody in this whole –	RTA
219	Major N	Excuse me.	MISC
220	Speaker 1:	All of them, They have like four squads at McGuire. I want you to go down –	SUK, RTA
221	Female Speakers:	They don't want to confirm this. They're down to – 8 knots.	NC
222	Speaker 1:	381 1635.	NC
223	Major N	Okay. Let's hear – yeah, press. Go with this.	RTA
224	Speaker 1:	Any fighters are pretty much unusable.	TMM
225	Major N	Why?	ITK
226	Speaker 1:	Cause he's way – he's almost to 102 already.	ITK
227	Speaker 10:	I got the guys calling McGuire squadron by squadron. We're gonna find a McGuire –	SUK
228	Speaker 10:	They're somewhere in this area.	UR, VRM
229	Major N	Is he on his way home? It looks like main 85 or is he out there. Delta wing. Just a minute, Stac. I'll get you the codes. That's why was asking how long that tanker can stay over there.	KT
230	H:	76th pilot office, this is H how may I help you?	MISC

231	Major N	Yeah, how you doing this is Huntress calling.	MISC
232	H:		MISC
233	Major N	Huntress North East Air Defense is this KC135.	ITK
234	H:	No, this is KC10.	ITK
235	Major N	KC10?	ITK
236	H:	Uh-huh.	ITK
237	Major N	Oh, okay.	MISC
238	Major N	Wrong number, huh?	ITK
239	Major N	Thank you.	MISC
240	H:	Bye.	MISC
241	Major N	Bye. Okay.	MISC
242	Speaker 19:	Nobody's home at Rocco and nobody's airborne at	SUK
243	Speaker 10:	has just been hit. We got them off, but –	NC
244	<i>Foxxy:</i>	That was possible hijack.	ITK
245	Speaker 10:	Possible hijack. We let now planes in the sky.	ITK
246	<i>Foxxy:</i>	No Squawk.	ITK
247	Speaker 10:	No Squawk.	ITK
248	Major N:	I don't know.	ITK
249	Speaker 20:	This is pilot's shop. KC10. This is Holly. May I help you?	MISC
250	Major N:	KC10 should not be dead if	NC
251	Speaker 20:	That's right.	NC
252	Major N:	Hey, you guys have anybody up there flying near the JFK area.	ITK
253	<i>Foxxy:</i>	Hey, sir, we have a second hijack.	SUK
254	Speaker 20:	I don't know let me check.	ITK
255	Foxxy:	United. Standby, sir.	ITK
256	Speaker 10:	You have the number.	ITK
257	Major N:	After the second team.	NC
258	<i>F</i> охху:	Sir, we got an unconfirmed second hit from another aircraft.	TMM
259	Speaker 1:	We have nothing in the area.	ITK
260	Speaker 10:	All right. Keep calling them.	RTA
261	Foxxy:	From Boston, sir.	ITK
262	Speaker:		MISC
263	Sergeant B:	How you doing, sir? This is Sergeant B over at –	

264	Sergeant B:	We got a hijack. I don't if you guys already know that.	TMM
265	Major N:	We couple flights out with assists LAX, and we're wondering if you happen to have any airborne access with the 1075 area.	
266	Sergeant B:	We got a crew airborne right now.	ITK
267	Sergeant B:	I don't where they went though. I think 204 or 212. You can find them. They're team 23. Two crews airborne right now. Team 23 and team 24. New York Center will be working – they're up north-east of New York. Would be my guess. I can look at my computer.	VRM
268	Major N:	Okay, sir.	MISC
269	Sergeant B:	They're airborne. Two DC10s and they've got a lot of fuel there. They're heavyweights, so they'll have enough fuel to be airborne almost all day.	
270	Major N:	DC10.	ITK
271	Major N:	And it's team 23 and team 24.	ITK
272	Major N:	Okay. So you wouldn't happen to have flight –	ITK
273	Sergeant B:	Is this explosion part of that that we're looking at now on TV?	ITK
274	Major N:	Yes.	ITK
275	Sergeant B:	Jesus.	MISC
276	Major N:	There's a second hijack also of United Airlines.	SUK
277	Sergeant B:	New York Center is who you need to get a hold of.	ITK
278	Major N:	Thanks, I'll do that.	ITK
279	Sergeant B:	All right. Thank you. Bye.	MISC
280	Major N:	Bye. I got team 23 and team 24 airborne in New York Center air space. They're northeast of New York right now, two DC10s and they've got a lot of gas. I got to go past this – give me the number. 8Speaker 190 – 9Speaker 190. Okay. Is somebody –	
281	Sergeant B:	Okay. So he's on his way. Okay.	TSU
282	Major N	What is that?	ITK
283	Sergeant B:	The tanker is on it's way to us. There was a tanker right there and we've been trying to raise him.	
284	Major N:	Two planes –	ITK

285	Speaker 13:	How big are these planes?	IIC2
286	Major N:	Untied 175.	ITK
287	Speaker 13:	What are they packing?	ITK
288	Major N:	And the American was 11? You want to do me a favor?	ITK
289	Sergeant B:	See if IME can do flight plans for these guys, team 23 and team 24. Two DC10s, they're on 204 or 212.	
290	Major N:	Okay. Foxxy, plug in. Okay. Foxxy, this is what I foresee what we probably need to do. We need to talk to FAA. We need to tell them if this stuff's gonna keep on going. We need to take those fighters, put them over Manhattan. Okay. That's the best thing. That's the best play right now. So coordinate with the FAA, tell them if there's more out there which we don't know, let's get them over Manhattan at least we got some kind of play. Hold on	COA
291	<i>Foxxy:</i>	Are you sure?	ITK
292	Major N:	Yes, I'm sure. Unbelievable. I need some, man.	ITK
293	Foxxy:	I got a phone call for you.	MISC
294	Major N:	Yes, please.	MISC
295	Foxxy:	This is what I told the SB so far.	MISC
296	Major N:	Yeah, have ID call whoever they can to get it because I can't get New York.	RTA
297	Speaker 13:	All of New York City, yep.	ITK
298	Speaker 1:	Conar has been trying it though. The second suspected aircraft is United 175.	KI
299	Major N:	Here's a – okay. We can do that. Okay. Yeah, this is what I got going. Tell Foxxy to scramble Langley and send them in the same location.	
300	Speaker 1:	Battle Stations or Scramble?	ITK
301	Major N:	Battle stations only at Langley. Okay. Who's up there? Okay. Are you listening? This is what I told the SB so far. We need to get those fighters over Manhattan because we don't know how many guys are out of Boston and again.	COA
000	0 / /	It could be just two. It could be more	ITK
302	Speaker 1:	It could be just two. It could be more.	IIIN I

304	Speaker 1:	We just need somebody to call McGuire just in case. Not Whiskey 105 where they want FAA at Whiskey 105. They want to hold them in Whiskey 105.	·
305	Major N:	We need to be more effective at something and stick them –	СТ
306	Speaker 1:	There's some places being at 130.	ITK
307	Major N:	We're working tankers. That other main is going in.	ITK
308	Speaker 13:	We're working McGuire that whole area.	ITK
309	Major N:	Okay. Well, we can't they're in the FAA airspace. Well, we can – yeah, they're ours. Yeah, they're mine. Okay.	СТ
310	Speaker 1:	I have command post. OTC. Thank you	MISC
311	Major N:	You know what? I don't like them there.	СТ
312	Speaker 1:	We don't have anything on the – the female who was that?	ITK
313	Major N:	It's flying low.	СТ
314	Speaker 1:	Command post.	MISC
315	Foxxy:	Just for IDs –	MISC
316	Foxxy:	We're gonna park them in the north-west corner.	ITK
317	Major N:	Okay. I want those fighters closer in. I want them south of JFK.	COA
318	Speaker 1:	OTC right here. DSN 5745411 that's the OTC.	ITK
319	Major N:	Fighters. Okay. What's the number to New York Center.	ITK
320	Speaker:	80708	ITK
321	Major N:	I'm gonna call I think they're in Boston Center airspace. I'm not sure	ITK
322	Speaker 1:	Who the fighters?	ITK
323	Major N:	No, the tankers are looking for – forget about the teams.	ITK
324	Sergeant P:	Hey, this is Sergeant P calling from huntress – all right. Did you all just get the battle station – I'm sorry.	
325	Major N:	Can't do a God damn thing about it either. Okay. Guys I need some – I need no shit one tracker coming out of Boston that whole area. Anybody and I need another tracker just around this whole area of Manhattan.	

326	Speaker 1:	I'm just trying to get New York. Okay. The New York guys aren't answering.	ITK
327	Major N:	What?	ITK
328	Speaker 1:	I'm trying to get them, so it's one way I can help you.	ITK
329	Speaker 13:	No, we've got Maine. Tell them thanks we'll call them back if we need them.	RTA
330	Major N:	Okay. What I've also done is that I have trackers over Boston, JFK and in between there, and we're gonna try to pick up anything that we can.	
331	Speaker 1:	What we're doing is moving through Boston	NC
332	Major N:	These two guys.	VRM
333	Speaker 1:	Go low, turn the squawks off and then do their runs.	TSU
334	Major N:	That's the only thing that we can ascertain because we not seeing these guys until we got two hits from those guys. From the initial one the American Airlines after that we didn't see them. That's all we can do. Who's on the phone?	
335	<i>Foxxy:</i>	Somebody up north.	ITK
336	Speaker 13:	Have you been watching the news?	MISC
337	<i>F</i> охху:	So who is it? Langley?	ITK
338	Major N:	Langley command post.	ITK
339	Speaker 17:	This is NASA.	ITK
340	Major N:	How you doing, sir. This is in reference to the active air. We're trying to reach the military coordinator.	
341	Speaker 17:	Yeah.	MISC
342	Major N:	We're having a difficult time. We need a question that the fighter hold over New York, and –	
343	Speaker 17:	Standby. One.	MISC
344	Major N:	Yeah, quick 25, 26.	NC
345	Speaker 17:	Ok it's a question that they hold over New York City. Is that what you're saying.	ITK
346	Major N:	Yes. Go.	MISC
347	Major M:	This is Major M. Who am I speaking to?	ITK
348	Major N:	Yeah, this is Major Go ahead.	ITK
349	Major M:	Hey, nasty are you guys watching CNN?	ITK

350	Major N:	Yeah, we are in situation right now. I'm kind of busy.	ITK
351	Major M:	Okay. I just wanted to know. Bye.	ITK
352	Major N:	Yeah, where are you at here? Okay.	ITK
353	Speaker 1:	I'm kind of busy with all that stuff right now. I'll let him know. Yep.	ITK
354	Speaker 13:	We got OTIS.	MISC
355	Major N:	They're working that right now.	NC
356	Speaker 13:	We've got main in the airspace. We've got in the off load. We've got McGuire offering two more tankers if we need them.	
357	Speaker 13:	We can call them –	MISC
358	Major N:	Give McGuire – give me a KC10 and stick them in 107.	COA
359	Speaker 13:	Both of them?	ITK
360	Major N:	One.	ITK
361	Speaker 13:	One.	ITK
362	Major N:	KC10 should do us fine. Put it in 107.	ITK, COA
363	<i>Foxxy:</i>	Let the know that or what?	ITK
364	Major N:	I'm gonna do it.	ITK
365	<i>F</i> охху:	Okay.	MISC
366	Major N:	Take the call. Yes, sir. We've got Main 85 going to Whiskey 105 right now. We also have the fighters holding there. We're trying to move them down south of JFK. Okay. We got some bad scoop from FAA, so we got Main 85, he's going Whiskey 105, so that's no problem. He's got lots of fuel. Foxxy, he's already talking to them.I got another – I got two offers up from McGuire for KC10s. I'm taking one KC10 and putting it in Whiskey 107 and hold him there for Langley guys. And we're gonna probably put the Langley guys if we get them if we want to scramble Langley guys, we'll stick them just south – so we can do back up as well. Okay. We haven't gotten that yet. We'll get it.	
367	<i>Foxxy:</i>	Where's KC10 coming from?	ITK
368	Major N:	McGuire.	ITK
369	<i>Foxxy:</i>	You want me to track that?	IKT
370	Major N:	Yeah. Forward tell this guy.	NC
371	<i>Foxxy:</i>	Main 85 still in the same place?	ITK
372	Major N:	Yes, go. Thanks.	ITK

373	Female Speakers:	They blocked out all the –	NC
374	Speaker 1:	I'll tell you what	NC
375	Major N:	Tuesday morning. 12 – yes, we're talking 200, between 150 and 150. Yeah, 200 per aircraft. Okay. Hey, Iceman,	
376	Iceman:	Yeah.	MISC
377	Major N:	I got a KC10 I'm sticking him in Whiskey 107 for just in case.	KT
378	Iceman:	Oh, you did.	ITK
379	Major N:	I'm gonna stick him in there.	ITK
380	Iceman:	How much time do you got?	ITK
381	Major N:	KC10 he's fresh. He's fresh.	ITK
382	Iceman:	That's good.	NC
383	Major N:	That's on the track. Woohoo.	NC
384	Speaker 13:	We got to stay plugged to	NC
385	Speaker 13:	Sitting there working your tag.	NC
386	Speaker 13:	Need another telephone line to anybody.	NC
387	Major N:	Where's Main 85 from?	ITK
388	Speaker:	Say again.	ITK
389	Major N:	Yeah, they're airborne. They're PA.	ITK
390	Speaker 13:	Yeah, how about the other aircraft?	ITK
391	Major N:	What other aircraft? Oh, we haven't launched him yet. Can you grab that.	ITK, SUK
392	Speaker 13:	They're on standby basis.	TSU
393	Major N:	Basically yeah, and anybody that we could. They're working that issue right now. Yeah.	TSU
394	Speaker 13:	Main 85 65,000 pounds off.	TSU
395	<i>Foxxy:</i>	I've got team 23 and 24 on. McGuire on route to 107.	TSU
396	<i>F</i> охху:	All of them are loaded.	TSU
397	Major N:	Okay. Cool. You got that. They got call signs on? Sounds brutal. What are you gonna do? Okay. Cancelled	
398	Speaker 1:	We need to find a number for the 106.	RTA
399	Major N:	Which is?	ITK
400	Speaker 1:	Need a number for the 106.	ITK
401	<i>F</i> охху:	106 fighter –	ITK
402	Speaker 1:	Got one of two helicopters on standby for for the FAA.	SUK
	•	•	•

403	Major N:	Okay. Talk to the guys from Suffolk. Those are the guys shits down there. FAA. Yeah, Boston Center or Boston has this shut down by Boston Airport, and anything that's in the air, they're diverting out. I've been talking with Mr. Scoggins there from Boston center. He just wanted to know if we had any aircraft. I told him about the aircraft in the area that we have our fighters. Our fighters in the area, tankers and also – okay. Also we're in close contact, so If he sees anything squirrelly he's gonna give us a yell, and we're gonna press. Yeah. Battle Stations are sitting in the down stations right now. Two tankers from McGuire KC10s full, and I got 60,000 offload for the Main 85. Okay. We probably won't need them, but just status them anyway. What the hell? More the merrier. Yes, sir. The 15s are 0 by 2 by gun. My recommendation if we have to take anybody out large aircraft we use A9s in the face. Yes, 8B. No, but he just said I need what assets I have. And that's my recommendation is from earlier tests. Okay. He has guys going out to the 105. OTIS soft has recalled all it's pilots for possible use, so we got more aircrafts on standby. Yeah, what – what they're looking for is pilots I guess. So the recalled all their pilots as best as they can get. Right. Recall all their pilots?	RTA, SOG
404	Speaker 1:	No, they had six aircrafts that were going out on training missions.	SUK
405	Major N:	Six aircrafts going out on training, and we recalled them back?	ITK
406	Speaker 1:	Yes.	ITK
407	Major N:	Recalled them, and they're ready. Do we need to upload them? Yeah, ask the question, probably put the – put slammers if need be put slammers and heaters. Okay. Bye. Can somebody get me a cup of coffee? I don't know. Where'd Joe go? I don't even have one.	
408	<i>Foxxy:</i>	Okay. All right.	MISC
409	Major N:	That's fine.	MISC
410	Speaker 1:	What's OTIS at 45 and 46 that's gonna use them. You guys are airborne now?	ITK, ITK

411	Major N:	Shit. Give me a location.	ITK
412	Speaker 1:	They're airborne now. That's the one we –	ITK
413	Major N:	Okay. Third aircraft hijacked heading toward Washington. Okay. American Airlines is still airborne 11, the first guy. He's heading toward Washington. Okay. I think we need to scramble Langley right now, and I'm gonna take the fighters from OTIS and try to chase this guy down if I find him. Yeah You sure. Okay. He's heading towards Langley or I should say Washington. American 11 the original guy he's still airborne. We're still getting a — we're getting position.	R
414	Foxxy:	You got a position.	ITK
415	Major N:	We're got a couple of hijackers coming in real world. Got to go. Okay. Foxxy, scramble Langley, head them towards the Washington area.	
416	Foxxy:	Roger that.	MISC
417	Major N:	Could be – hold on a second.	MISC
418	Female Speakers:	We're trying to get a code right now.	ITK
419	Major N:	We're trying to get a code on this guy right now.	ITK
420	Female Speakers:	We do have a tail number.	IMM
421	Major N:	We do have a tail number. It's a – oh, it's – what was the tail number?	ITK
422	Foxxy:	Confirmed 4546.	ITK
423	Female Speakers:	November 334 alpha, alpha.	SUK
424	Major N:	November 334 alpha, alpha. If we can find him, we're – we're trying to get – we're trying to get the mode to try and get position on this guy. So then we'll run on them. Yep. Okay. Bye. Okay. These guys are smart.	TSU
425	Foxxy:	Yeah, they knew exactly what they wanted to do.	TSU
426	Foxxy:	Well, what the hell was track?	UR
427	Major N:	For the track possible third hijack; is that it?	UR
428	Speaker 1:	No, this is American Airlines, the first one.	UR
429	Major N:	Yeah, and they'd still be airborne.	UR

430	Speaker 1:	American Airlines, I don't know what the -	ITK
431	Major N:	Yeah, it's MCC. Go. Langley call signs birds are quit 2526.	ITK
432	Speaker 1:	You know what type it is?	ITK
433	Major N:	Quit, Quebec, uniform, India, Tango 2526. Got it. Okay. Right now what we're running with out there is 2 by 0 by gun for Langley, two tanks. Okay. Also we have the Pantha 4546 0 by 2 by 2 by gun three tanks.	
434	Speaker 13:	They trying to get in to a tail base this American 11 heading towards Washington.	ITK
435	Major N:	Plus I have more staff available to me if I need it. Okay. Also I have tanker Main 85. Okay. Got the tanker. I have additional tankers out of McGuire KC10s team call sign. I'm not sure on the numbers.	
436	Speaker 1:	22 and 23.	ITK
437	Major N:	22 and 23 two KC10s. I'm sticking them in Whiskey 107. Yeah, and did you get the word the Langley got scrambled.	
438	<i>Foxxy:</i>	We couldn't find a position on the airplane.	ITK
439	Major N:	Just got scrambled two minutes ago. No, that's – okay. Bye.	SUK
440	Foxxy:	FO says forget the tail chase, even though we couldn't find them.	R, COA
441	Major N:	Great. Just great	MISC
442	Team 23:	Yes, team 23 we just had a radar handoff on them from New York Center. They're squawking 1641 and they'll be turning directly 107 in approximately one minute.	SUK
443	Major N:	Copy that. Have them contact Hunterson 23456.	RTA
444	Team 23:	23456?	ITK
445	Major N:	Yes, ma'am.	ITK
446	Team 23:	All right. That's affirmative echoes 650500 exclusively.	SUK
447	Major N:	Copy that. Exclusive. Thanks.	ITK
448	Team 23:	You're welcome.	MISC
449	Major N:	Yeah, just give it to –	NC
450	Speaker 1:	Yeah, 1641. You got that off the tail end of that.	NC
451	Major N:	He's not even in our airspace yet. We're gonna – we'll have him.	ТММ

452	Speaker 1:	It was couple minutes before.	NC
453	Major N:	Right. Yep. Holy smikeys, Batman. Okay. Hey, Ronny –	NC
454	Speaker 21:	l'm good. I'm good. Team 21 up on –	NC
455	Major N:	Ron, do me a favor scramble piece of for quit 25 please. Okay. Here it comes.	
456		Team 21 huntress radar contact, showing that our angels 23 and 107. How copy?	ITK, VRM, MISC
457	Major N:	Okay. I want those fighters –	NC
458	Team 21 huntress:	Angels 23 and 107, 6,000 flight level 500 concurrent. You're mission is to orbit Whiskey 107.	
459	Major N:	They're over New York. Great.	ITK
460	Speaker:	Сору	MISC
461	Major N:	It's American Airline.	ITK
462	Team 21 huntress:	Also team 23 is also in our airspace in a few more minutes.	KT
463	Speaker:	Fucking assholes.	MISC
464	Major N:	Probably United – we're getting information that American Airlines 11, the first airplane.	MISC
465	Team 21 huntress:	Question on what your offload is right now?	ITK
466	Sergeant B:	There's got a lot of people dead in there.	MISC
467	Speaker:	Probably in a couple minutes.	MISC
468	Team 21 huntress:	Good.	MISC
469	Major N:	Did you find a 1641?	ITK
470	Speaker 1:	We thought it was American Airlines 11 –	ITK
471	Major N:	While I've got that there.	ITK
472	Speaker 1:	But Boston's saying it's unaccounted for.	TMM
473	Major N:	We're working on it.	ITK
474	Team 21 huntress:	I understand you just gave me a fuel emergency.	ITK
475	Speaker:	Negative for now. I just want to know what your off load is of potential problems.	ITK
476	Major N:	Quit 25.	MISC
477	Female Speakers:	How do you go about it?	ITK
478	Major N:	All right. I'm gonna put an intercept	ITK
479	Sergeant B:	If locate 1641.	RTA
480	Major N:	I need to get a position.	ITK

481	Sergeant B:	Yeah,	NC
482	Major N:	25 and 3. Okay. There's three airplanes unaccounted for. American Airlines 11 may still be airborne. That's United 175 at the World Trade Center. We're not sure who the other one is.	ТММ
483	Speaker 1:	Right.	MISC
484	Major N:	Fuck.	MISC
485	Speaker 13:	You're gonna take your fighters up. You're gonna cover this area.	COA
486	Major N:	l didn't see it. Unbelievable. Jesus.	MISC
487	Team 21 huntress:	Huntress team 21.	MISC
488	Major N:	Go.	MISC
489	Team 21 huntress:		MISC
490	Speaker 1:	Team 21 shouting for you.	MISC
491	Major N:	We're trying to get a hold of them trying to make sure. My plan is to stick my fighters –	KT
492	Sergeant B:	Team 21 huntress go ahead.	MISC
493	Team 21 huntress:	Offload 43	SUK
494	Sergeant B:	Offload 43. Thanks.	ITK
495	Team 21 huntress:	You're welcome.	MISC
496	Speaker:	change them. Put weapon symbology and name them team 264.	VRM, RTA
497	Major N:	I'm not sure.	ITK
498	Speaker:	How do you line reference?	ITK
499	Major N:	Did you launch 2 or 3 of Langley?	ITK
500	Sergeant B:	We launched one flight of two.	ITK
501	Major N:	That's all we scrambled so far. We'd like to get an extra pilot and extra fighter. Let's launch them too.	*
502	Speaker 1:	Can I have your OTIS squawk?	RTA
503	Speaker 13:	l don't know right now.	ITK
504	Sergeant B:	No, 221 and 107. Thank you.	ITK, MISC
505	Major N:	This is team 23.	ITK
506	Speaker 1:	Yeah, I just told Jeremy I want them down in 386 when you get a hold of them.	COA

507	Major N:	Okay. You know what get rid of this God damn sim – turn the – Hey, turn the sim switches off. Get ride of that crap.	
508	Team 23:	Do you want him in AR track or just orbiting in 386?	FI
509	Major N:	We need them to get down to Whiskey 386.	FI
510	Team 23:	You don't care where just in 386?	FI
511	Major N:	Just enter 386, kick them over to our frequency, and we'll take care of them after that.	
512	Team 23:	I'm sorry. Can you say again where you want them?	FI
513	Major N:	We want them in the Whiskey 386 area.	FI
514	Team 23:	All right.	FI
515	Major N:	Thanks. Bye, bye.	MISC
516	Speaker 13:	a fighter from Langley. I'm gonna have three fighter out of Langley.	ITK
517	Major N:	You're gonna go to Whiskey 386.	COA
518	Speaker:	Standby.	MISC
519	Major N:	505 airborne. I through them in there originally for a pivotal point. Good move. Move them down there. That's what I'm getting.	
520	Speaker 15:	Hey, what's going on?	ITK
521	Major N:	Darling, I'm busy. I can't talk. I'll call you when I'm done.	ITK
522	Speaker 15:	Yeah. All right. Bye.	MISC
523	Major N:	All right. Bye.	MISC
524	Speaker 16:	What time are they gonna run the rendezvous and the receivers?	TMM2
525	Major N:	Right now, ma'am. We are not having them rendezvous with anybody. We are staging them.	
526	Speaker 16:	Staging them. Roger that. I'll relay that information.	TMM2
527	Major N:	Thank you. You're gonna take 23 to 386?	ITK
528	Sergeant B:	Yes. I have talked to giant killer.	ITK
529	Major N:	Giant Killer huntress 924 reference 386.	MISC
530	Speaker 22:	Standby.	MISC
531	Major N:		NC
532	Speaker 22:	Yes, Major.	MISC

533	Major N:	Yes, this is huntress. We're gonna bring team 23 into 386. Can I get the airspace at this time?	
534	Speaker 22:	Sure. You can have Alpha through Foxtrot, is that enough? Is that where you want to put him or –	
535	Major N:	Alpha through foxtrot will be fine for right now. 6 to 50 concurrent or exclusive.	SOG
536	Speaker 22:	6 to 50 concurrent.	SOG
537	Sergeant B:	Hey.	MISC
538	Major N:	Yeah. All right. Here's what's gonna happen. Team 23 Giant Killer already called, they have control of him. They're gonna direct him down into the Whiskey 386. As soon as he crosses into the airspace, we're gonna kick him off frequency, and we'll tell him where to go from there. Okay.	
539	Speaker 1:	Roger. I'm not telling them anything other than the fact that I just want –	KI
540	Major N:	Get them to the airspace.	KI
541	Speaker 1:	and this is what we're expecting.	KI
542	Major N:	Yeah, I know it.	MISC
543	Speaker 1:	This is what we're expecting for the NCA area.	MS
544	Major N:	I know it. Got team 23 coming down –	TSU
545	Major N:	8641 mode 3, yeah. Okay. I got get the symbology to them.	VRM
546	Major N:	Well, he should have it already, doesn't he?	ITK
547	Speaker 1:	No, he doesn't.	ITK
548	Major N:	Yeah, If you could do that then that'd be great. Don't worry about changing the symbology. He's got it. Okay. Yeah, I know he's taking care of it. I know I can't.	
549	<i>Foxxy:</i>	They just don't want to ask any questions.	ITK
550	Major N:	l'Il put you on 23. Oh, I can't do that either. It's got to be a bravo track.	MISC
551	?	Nothin. Its just gonna be whatever. Well right now. Quit25 is headed into whiskey 386 at this time and I have no idea why. Is Langley airborne?	
552	Speaker 13:	Yes.	ITK
553	Major N:	Well, I'm not gonna take the hand off. I'm gonna have them here at this time.	COA

554	Speaker 13:	Quit 25, 26, 27.	ITK
555	Major N:	At this time – They're paired right there.	SUK, VRM
556	Sergeant B:	So you know if you control.	ITK
557	Major N:	Okay I've got this one here team 23. He's already done that.	VRM, ITK
558	Sergeant B:	I've talked to Giant Killer –	ITK
559	Major N:	Hey, Ronny, we have team or quit 25 airborne at this time.	ITK
560	Major N:	Did you know that?	ITK
561	Sergeant B:	Team 23 Giant Killer's out of Langley Whiskey Speaker 196.	ITK
562	Major N:	They haven't taken their hand off yet, but they are airborne.	SUK
563	Sergeant B	And we already got the airspace too.	ITK
564	Major N:	It's just the two right now sir.	ITK
565	Speaker 1:	Jeremy, Jeremy?	MISC
566	Sergeant B:	Yes.	MISC
567	Speaker 1:	Hey, is I. S. on the up floor.	ITK
568	Sergeant B:	Yeah, he's standing right here.	ITK
569	Speaker 1:	Tell him S. C. – now, does he have a STU in his office?	ITK
570	Sergeant B:	S. C. wants to know if you have a STU in your office.	ITK
571	Speaker 16:	Yes.	ITK
572	Speaker 1:	Can he use your office.	ITK
573	Sergeant B:	He wants to know if he can come up and use your office. Yeah, no problem.	ITK
574	Speaker 1:	Okay. Thanks. Bye.	MISC
575	Major N:	Giant Killer huntress 924 Whiskey 386. What was the airborne time? American	ITK
576	Female Speakers:	American 77 –	NC
577	Speaker 16:	77. Got it.	NC
578	Major N:	Giant Killer huntress 924 reference Whiskey 386.	MISC
579	Huntress:	Hi, this is huntress. Go ahead.	MISC
580	Major N:	Yes, sir in regards to quit 25.	MISC
581	Huntress:	Yes, sir.	MISC
582	Major N:	I would like you to work with Center. We need them to go direct Baltimore Washington International and have them bring up huntress on the auxiliary frequency	

		234.6.	
583	Huntress:	You guys switched 25 move in airspace and now you want him to go to Baltimore?	FI
584	Major N:	Yes, sire. We're not gonna take him in Whiskey 386.	FI
585	Huntress:	Okay. Once he goes to Baltimore, what we supposed to do?	FI
586	Major N:	Just have him contact us on the auxiliary frequency 234.6. We just need – instead of taking handoff to us and then us handing him back. Just tell Center that they've got to go to Baltimore.	
587	Huntress:	Roger. Standby.	MISC
588	Major N	Why are we doing that? I'm gonna choke that guy.	MISC
589	Speaker 13:	Hey, just remember everything you say is being recorded.	MISC
590	Major N:	I know.	MISC
591	Speaker 13:	The tape will be played back.	MISC
592	Major N:	It's all good. Right now we got quit 25 which we are not controlling will come up on our aux. We've got team 23 going with –	
593	Sergeant P:	Huntress weapons Sergeant P. I've got a question for you.	MISC
594	Major N:	Yes, sir.	MISC
595	Sergeant P:	The military aircrafts that are in the air right now?	ITK
596	Sergeant P:	We're wondering if we should tell them to return to base if they're just on training missions or what you guys suggest.	
597	Major N:	No, they're actually on the active air per the DO out there.	SUK
598	Sergeant P:	So everybody that's up, you want them up?	ITK
599	Major N:	Yes, we did send the ones home and 105 that were in the train – they are sent home. The panthas are out there for OTIS.	ITK, ITK
600	Sergeant P:	Right, I understand that. I think there's somebody training up in Falcon auxiliary right now.	
601	Major N:	Unknown. Standby. Let me –	MISC

602	Sergeant P:	Just in general anybody who's training.	ITK
603	Major N:	Anybody in training send them home. Any training in Falcon send them home.	COA
604	Sergeant P:	Yeah, we're gonna –	NC
605	Major N:	Yeah, go ahead and send them home.	COA
606	Sergeant P:	Okay.	MISC
607	Team 23:	Is it all right if Center talks to them the whole way to Baltimore? Is he gonna hold over Baltimore like –	
608	Major N:	We want Center maintain primary control. We just want them to be able to talk to us in our auxiliary freq. 234.6.	
609	Team 23:	Do you care what altitude they go to Baltimore at just get down there?	ITK2
610	Major N:	Just as long as they get there.	ITK2
611	Team 23:	And they're just gonna hold over Baltimore?	ITK2
612	Major N:	For right now, ma'am. Yes.	ITK2
613	Team 23:	All right. Thanks.	MISC
614	Major N:	Okay. Foxxy, I got aircraft 6 miles east of the White House.	KT
615	Sergeant B:	That came from Boston?	ITK
616	Major N:	We're gonna turn him and crank it up. Here we go. This is what we're gonna do here.	R
617	Speaker 1:	He's 8 miles east of the White House right now.	SUK
618	Speaker 1:	What happened?	ITK
619	Major N:	Is that airline in now?	ITK
620	Team 21:	Do you want a relay?	ITK
621	Major N:	Authorize the airfield. What me to authorize it?	RTA
622	Sergeant B:	I can't get through.	ITK
623	Team 21:	Yeah, we're here loud and clear.	ITK
624	Speaker 1:	What are we doing?	ITK
625	Quit 25:	Quit 25 huntress.	MISC
626	Major N:	Team 23 huntress 924 reference Whiskey 386.	MISC
627	Team 23:	Go ahead.	MISC
628	Major N:	Ma'am, we're going right now with quit 25. They're going direct Washington.	KT
629	Team 23:	Quit 25 is on – we're heading is – we're heading them off Center right now.	KT

Major N:  Ma'am, we need to have right now. We got to contact them on 234.6. We them.  Roger that.  Major N:  Good thing. Ma'am, do you understance.  Major N:  That's the radar only guy right there?  Major N:  Radar only.  Sergeant B:  This guy right here? Bravo 013.  Speaker 1:  Speaker 1:  Bravo 032.  Major N:  Bravo 032.  Major N:  No altitude.	need MISC
631 Team 23: Roger that. 632 Major N: Good thing. Ma'am, do you understand 633 Speaker 1: That's the radar only guy right there? 634 Major N: Radar only. 635 Sergeant B: This guy right here? Bravo 013. 636 Speaker 1: 32 637 Major N: Bravo 032. 638 Sergeant B: Oh, this dude right here? 032.	VRM ITK, VRM VRM, ITK NC NC
- G33 Speaker 1: That's the radar only guy right there?  634 Major N: Radar only.  635 Sergeant B: This guy right here? Bravo 013.  636 Speaker 1: 32  637 Major N: Bravo 032.  638 Sergeant B: Oh, this dude right here? 032.	VRM ITK, VRM VRM, ITK NC NC
634 Major N: Radar only. 635 Sergeant B: This guy right here? Bravo 013. 636 Speaker 1: 32 637 Major N: Bravo 032. 638 Sergeant B: Oh, this dude right here? 032.	ITK, VRM VRM, ITK NC NC
635 Sergeant B: This guy right here? Bravo 013. 636 Speaker 1: 32 637 Major N: Bravo 032. 638 Sergeant B: Oh, this dude right here? 032.	VRM, ITK NC NC
636 Speaker 1: 32 637 Major N: Bravo 032. 638 Sergeant B: Oh, this dude right here? 032.	NC NC
637 <i>Major N:</i> Bravo 032. 638 <i>Sergeant B:</i> Oh, this dude right here? 032.	NC
638 Sergeant B: Oh, this dude right here? 032.	
3 7	ITK, VRM
639 Major N: No altitude	
1000 Imajor 14. Into anticado.	ITK
640 Sergeant B: Yeah, right here.	VRM
641 Major N: I got him. I got him. Bravo 032. You r want to check that out. We just lost trace	
642 Speaker 13: Get a V point.	RTA
643 Major N:  Can you get a view point on that? We did. Okay. We got guys looking at Hold on. Where's Langley at? Where the fighters? He's squawking.	him. ITK
644 Sergeant B: Over Long Island.	ITK
645 Major N:  They're at 386 going north. Right to Pantha. Okay. Can you get those back Okay. I don't care how many window break. ID's gonna have to work that the MCC. Where'd 032 go?	c up?RTA / you
646 Female O8252 west. Speakers:	ITK, VRM
647 Major N: They're there. 032, where's he go? I g find the track.	ot to VRM, ITK,
648 Speaker 1: Langley out in 386.	SUK
649 Major N: Why'd they go up there?	ITK
650 Speaker 1: Because sent them out there.	ITK
651 <i>Major N:</i> Damn it. Okay. Push them back. Sergeant	Hi, COA
652 Speaker 17: Hi, Sergeant here in Syracuse. calling to let you know that we cancelled morning flights.	
653 Major N: Copy that.	MISC
654 Speaker 17: Okay.	MISC
655 Speaker 17: Thank you.	MISC
656 Major N: Bye.	MISC

657	Main 85:	Main 85 come in contact with command center.	RTA
658	Major N:	Standby.	MISC
659	<i>Foxxy:</i>	Standby.	ITK
660	Major N:	Where's he at?	ITK
661	Main 85:	Yes.	ITK
662	Major N:	Who do we need to contact?	ITK
663	Main 85:	Command center.	ITK
664	Major N:	Command center. What do you want?	ITK
665	Female Speakers:	·	NC
666	Major N:	O032 data that faded.	ITK
667	Huntress:	We got a team flight what options you gonna work out in New York City?	R
668	Major N:	Standby.	MISC
669	Female Speakers:		NC
670	Major N:	Four? No, we've got three now.	TMM
671	Sergeant B:	Three.	TMM
672	Major N:	No, we've heard three now. United 175, American Airlines 11 and American 750. Jocular, just push him in there whatever altitude he's at. It's fine.	
673	Huntress:	Okay. Can I keep him east?	ITK2
674	Major N:	Yeah, Copy that.	MISC
675	Huntress:	Okay. Roger that.	MISC
676	Speaker 13:	What's the 386 at current block?	ITK2
677	Major N:	Okay. Sir –	MISC
678	Speaker 1:	Have you checked on do we know?	NC
679	Sergeant B:	No, they could turn them up. Yeah, I know about that.	SOG
680	Speaker 1:	Delta what?	ITK
681	Major N:	He's not squawking 7s yet. 70140 now.	SUK
682	<i>Foxxy:</i>	You need a weapons check?	ITK2
683	Sergeant B:	Quit 25 huntress confirm squawking 7777.	RTA
684	Quit 25:	Quit 25 squawking 777.	RTA
685	Major N:	Got it. This one?	VRM
686	Sergeant B:	Quit 25.	MISC
687	Quit 25:	Huntress quit 25. Go ahead.	MISC
688	Sergeant B:	Quit 25 traffic at 22, 000 broad. 000547 checking southwest.	SUK
		100	

689	Speaker 18:	Sergeant?	NC
690	Speaker 18:	Did you know that Bravo 032?	ITK2
691	Major N:	No, I didn't.	ITK2
692	Speaker 18:	Okay. Bravo 032 if you look over Washington.	VRM
693	Major N:	O33?	ITK2
694	Speaker 18:	32	ITK2
695	Major N:	Copy.	MISC
696	Speaker 18:	Was outside of Washington.	ITK2
697	Quit 25:	Do you have a specific camp for us over Washington?	ITK2
698	Major N:	Standby and we're gonna continue it's current heading.	RTA
699	Sergeant B:	Holy shit.	NC
700	Speaker 13:	It looks like to the Pentagon. Then you be pissed right?	SUK, VRM
701	Major N:	I believe it's approximately 75 miles.	ITK2
702	Sergeant B:	Syracuse cancelled of their flights this morning. Bravo 089.	TSU
703	Major N:	Well, for two seconds we got – right here. It's right next to us. Okay. That's Bravo 032. I've got that paired with right now. Yes. I'm ahead of you on that one. Quit 25 mission to establish cap abroad. 320 112.	TMM, COA
704	Quit 25:	Copy. 320 112.	MISC
705	Major N:	Attention all players, all teams contact huntress 2335.9. They can't get in touch with Quit 25.	
706	Sergeant B:	Yeah, still got those guys there.	VRM, TMM
707	<i>Foxxy:</i>	50, 50 concurrent.	TMM
708	Sergeant B:	Quit 25 airline traffic 01019 23, 000.	KT
709	Major N:	They've got these guys.	VRM /TMM
710	Speaker 1:	We got more guys coming up from Langley or at first Peters, slammers, tanks, they're bringing them up. So they're taking the tankers –	
711	Major N:	Yeah, everybody's busy. I'll try to call tonight. I forgot about it already.	NC
			·

	T		1
712	Speaker 1:	I have to make sure everything is set up. I just set that one up. I don't know where the one's at.	
713	Sergeant B:	It's the SN.	ITK
714	Speaker 1:	Where is it?	ITK
715	Major N:	Okay. Got another aircraft spotted near the Pentagon. Also did you get the work I got a Delta 89er south, southeast of Toledo.	
716	Sergeant B:	You know there's another possible hijack?	SUK
717	Major N:	Now, we're heading up here. Yeah, I got a special track on that guy. Okay. We're searching for it now.	
718	Sergeant B:	Quit 25 can we just have you loud and clear maintain current headings Angels 23.	COA
719	Quit 25:	We are at Angels 23 and we are to the point if we can get a lat. line that'd be great.	ITK
720	Sergeant B:	Toledo, Copy.	MISC
721	Speaker 1:	Are you generating enough airplanes. You got three up now.	ITK
722	Major N:	I got three up now. OTIS in a turn. I got in a turn, and I'm trying to contact for another possible hijack in	
723	Sergeant B:	I know. If you just freaking work with me for two seconds we'll handle it.	TNSA
724	Major N:	Calm down. I think he's – you might want to contact Bill. He said that he got stepped on and trying to work on Suffrage. Talking about Suffrage, did anybody get in contact with them yet? Good. They're mine.	
725	Sergeant B:	Quit 25 huntress. Confirm all birds squawking quad 7.	RTA
726	Quit 25:	Affirmative all birds squawking in quad 7.	RTA
727	Sergeant B:	Huntress copy that. Standby for the lat./long. of the cap point.	ITK
728	Major N:	They got nobody there in suffrage.	SUK
729	Sergeant B:	I'm talking to Toledo right now, and they maybe able to get somebody airborne.	SOG
730	Major N:	Okay. In case they find somebody else.	SOG
731	Sergeant B:	As far as the suffrages there they got F16s.	SOG
732	Speaker 1:	What about Duluth?	SOG
733	Sergeant B:	What?	MISC
734	Sergeant B:	Duluth you got no fighters.	SOG

735	Speaker 1:	We'll call in units and ask anybody in that area that we have a possible hijack.	SOG
736	Sergeant B:	· · · · · · · · · · · · · · · · · · ·	
737	Major N:	Yeah, we're pushing it.	SOG
738	Foxxy:	I'm sorry, but you're the closest guide.	SOG
739	Speaker 13:	You're gonna have to another setting.	RTA
740	Major N:	What we're gonna have to do is talk to the commander there. He's gonna have authority of that. I'll work the deal. Yeah, Colonel M, he might need to call up the Toledo guy. Okay. Yeah.	
741	Sergeant B:	Is Toledo?	NC
742	Major N:	Yeah. There we go. This sucks. Here let me help you.	NC
743	Sergeant B:	That came from who?	ITK
744	<i>Foxxy:</i>	Quit 25, you calling huntress?	ITK
745	Quit 25:	take me out side of the	ITK
746	Major N:	I can't either.	NC
747	Team 23:	Huntress, yeah, this is team 23. Where do you want us keep him at. He wants to go on to 020 heading and it's gonna take him right back out of Whiskey 386.	
748	Major N:	I might have to have Colonel M come down and talk to this guy. Oops sorry. What?	ITK
749	<i>Foxxy:</i>	Here I'm gonna put you on with Major	MISC
750	Major N:	What? What's up?	MISC
751	<i>Foxxy:</i>	Wants to know about this track by Cleveland and wants to know if anybody that can intercept –	
752	Major N:	We're trying — Toledo is gonna call me directly and ask who's authority. We're gonna try — I'll have Colonel M come done. We'll do this whole homeland defense thing. I'll talk to them. Who is it? I'll schmoose it. I'll get some guys out there. MCC Major I appreciate it. I got folks here. Okay. Okay. Thanks. Okay. Bye. Who's that? Okay. Cool. Got it. Kind of slow, huh?	

753	Sergeant B:	Yeah.	MISC
754	Major N:	Only 140 knots.	SUK
755	Sergeant B:	Huh?	ITK
756	Major N:	Only 100 knots.	SUK
757	<i>Foxxy:</i>	That's real world. Yep, I'm here. Can you hear me? Yes, I heard you. There's reports that; is that correct?	
758	Major N:	Give them a DNA. 1304.	COA
759	Foxxy:	Go ahead.	MISC
760	Major N:	The Pentagon just got hit.	SUK
761	Speaker 1:	You got anyone going after that Delta flight?	ITK2
762	Major N:	We're trying.	NC
763	Speaker 1:	Okay. I'm just –	NC
764	Major N:	Toledo. We're gonna run out of radios over Washington. Okay.	SUK
765	Speaker 1:	Somebody's coming to look at itout of there is the only idea.	NC
766	Major N:	Okay. Just do the best you can. Okay. What's the word on Toledo?	ITK
767	<i>Foxxy:</i>	Well, at the direction – we're losing radios out of our sights already, and they're not even	
768	Major N:	God damn it. I can't even protect my NCA. Jamie. Jamie. Find out what's going on with my Toledo guys.	
769	Sergeant B:	When we pulled in to	NC
770	Major N:	Turn them. I'll pay for it. I got a credit card. Okay. At what two — Yeah, well, we're going there. Okay. Yeah, I'll tell you what the history on that is. The fucking Giant Killer sent them out to 386. Yeah, it's going — yeah, that's what I did. Well, we couldn't get them. Okay. Bye. Make sure where the information came from that the Pentagon was hit though. I don't know where —	TMM2
771	Sergeant B;	I put unconfirmed.	ITK
772	Major N:	I don't know. Yeah, find a job. Who's doing that? Okay. Okay. Good. Talk to me about my Langley guys. I want them over NCA now.	COA
773	Sergeant B:	They're heading west to Las Vegas.	SUK

774	Major N:	Need a controller for this. Okay. I need the Langley guys there now NCA. 089 is making a hard right turn, so whoever that was.	
775	Female Speakers:	Out of Toledo	NC
776	Major N:	A few minutes.	NC
777	Speaker 13:	They don't have any aircrafts.	NC
778	Major N:	Nope.	NC
779	Speaker 13:	Trying to get Toledo on it.	NC
780	Major N:	Yeah. No, nothing yet. We are. Yes, they're air to mud, but they're also air to air. Charlie, we're also talking to Suffrage as well. So I'll get something out in that area. Yep. Right. Okay	
781	Speaker 1:	Keep an eye on it.	RTA
782	Major N:	This is gonna be it right now.	ITK
783	Speaker 1:	Is this the 107.	VRM
784	Major N:	Are you former telling Florida it's 6311?	ITK
785	Speaker 1:	Sorry, got the 103 <sup>rd</sup> coming to this.	SUK
786	Major N:	Before we tell 89 – Okay. FB.	NC
787	Foxxy:	Yeah.	MISC
788	Major N:	FB pick up your hotline.	RTA
789	Speaker 1:	Not yet.	MISC
790	Major N:	They want FB to pick up the –	NC
791	Speaker 1:	Standby. Crank it up. Crank it up.	RTA
792	Major N:	Battle cab wants the FB to pick up the line. They want everybody off. Here you go. Duluth is not available right now. We need cargo though. S	
793	Sergeant B:	Looks like the Pentagon got hit.	TMM
794	Major N:	The Pentagon did get hit.	TMM
795	Sergeant B:	Oh.	MISC
796	Speaker 1:	We need to make a command decision. He's saying he needs more surveillance people. We're recommending Charlie	
797	Major N:	l'd say yeah get them in here. Sam, do you have track number on Delta 89 was that Bravo 089?	
798	Speaker 12:	Yes.	MISC
799	Speaker 1:	Standby. Standby. I'll get you Major in just a few.	MISC

800	Major N:	Okay. Also – who's up on there? Okay. Looks like the special – the guy from the Toledo area just turned north a bit.	
801	Speaker 1:	I got it.	MISC
802	Major N:	Okay. You got it. Okay.	MISC
803	Speaker 1:	I just spoke to him. He's up in	NC
804	Major N:	Could be or Detroit. They're airborne. They're going airborne. What's your load out?	
805	Speaker 1:	I'm really – haven't been working that hard on Bravo, so I'm not real familiar. You're gonna have to bear with me.	
806	Major N:	Can I get a track number Bravo 257.	RTA
807	Speaker 1:	If anything –	NC
808	Major N:	Okay. I'm on that. Bravo 257?	ITK
809	Speaker:		NC
810	Speaker:	Just a minute.	MISC
811	Major N:	Got it?	NC
812	Speaker 1:	but the two keep them airborne – if we want to get the FAA on the phone and try to set up.	
813	Major N:	They can float in – I don't know.	ITK
814	Major N:	I got a report of a search track by New York City and that weapons team has been directed to check it out.	
815	Major N:	Okay. And he's asking the fighters the searches.	TSU
816	Speaker 13:	We have five targets also. They're supposed to check out the target in the area in New York too.	
817	Major N:	Let's the large airline.	TSU
818	Female Speakers:	They want to know what you want them to do. Do you want them to go to a point or do you want them to refuel or what?	
819	Major N:	Who?	ITK
820	Major N:	Okay. We've got a report of a search track heading towards New York City Bravo 275 that weapons team is gonna try and get their fighters to check it out.	
821	<i>Foxxy:</i>		NC
822	Foxxy:	He says he needs more people.	NC
823	Major N:	Recall them. I got them.	COA

824	Speaker 1:	Recall Charlie crew swing. I want all the surveillance people in here pronto.	RTA
825	Major N:	Not at this time. We're very, very busy. I'm sorry.	RTA
826	Sergeant B:	Suffrage and Toledo both.	ITK
827	Major N:	They have been scrambled?	ITK
828	Major N:	How many aircrafts?	ITK
829	Sergeant B:	Two each.	ITK
830	Female Speakers:	Somebody had send to Washington.	ITK
831	Major N:	No, that's our –	ITK
832	Sergeant B:	Come on. Does the FAA want to know what	NC
833	Female Speakers:	Right.	ITK
834	Sergeant B:	I want to hold him there.	TSU, VRM
835	Major N:	Okay. Lat./long bravo –27 – or 089 to	TSU
836	Speaker 16:	Sir?	MISC
837	Speaker 16:	All the Charlie 3 surveillance and two ID tags.	RTA
838	Major N:	Fine. Make that large as well.	RTA, VRM
839	Speaker 1:	We recalled Charlie and –	TSU
840	Major N:	We're doing it.	TSU
841	Sergeant G:	Western sector Sergeant G.	MISC
842	Major N:	Hey, how you doing? This is Major Let me talk to your MCC.	MISC
843	Sergeant G:	Just a second.	MISC
844	Major C:	This is Major C. Can I help you?	MISC
845	Major N:	Who is this? Hello.	MISC
846	Major C:	Yes, this is Major C. Who is this?	MISC
847	Major N:	Hey, C this is Nasty how you doing?	MISC
848	Major C:	Hey, doing all right.	MISC
849	Major N:	We're not doing so good right not.	MISC
850	Major C:	Yeah, I know.	MISC
851	Major N:	I need you guys to make sure that you guys are — this could be a world wide kind of thing. CONUS thing.	
852	Major C:	Yes, I know.	ITK
853	Major N:	Okay. What do you guys up for players? Have you been taking to Fargo at all?	ITK2

854	Major C:	Yes, we've talking to a bunch of folks. Right	ITK2
	inajoi o.	now all we've got is our standard four aircraft.	
855	Major N:	Okay. What I would like to do if I could possibly steal some aircraft out of cargo from you guys if need be.	
856	Major C:	Okay. You want us to bring two up at Fargo?	TNSA
857	Major N:	Yeah, would you please.	TNSA
858	Sergeant B:	Weapons? No?	ITK2
859	Major N:	But bring them with weapons too if possible.	ITK2
860	Major C:	Yep. Okay. We'll do that.	ITK2
861	Major C:	Okay. Copy.	MISC
862	Major N:	Appreciate it. Bye.	MISC
863	Major C:	Yep. Bye.	MISC
864	Major N:	Who's up? I just called the watch and just had him bring up — I requested them bring up two birds from Fargo loaded. Okay. We got — well, here's the deal. The birds out of Suffrage, they just did a quick turn. They got no weapons. They just know to the range. They blew all the road. I know, but we got two. They're loitering, and we're gonna send them done to do investigations. We're still keeping Suffrage. I've got them airborne already, and two more from Toledo. That special tracks over the — what do you call it — over the lack right now. So what we gonna do with it if it is it? What are we gonna do? I got to give my guys direction? I don't know if they got bullets. Okay. Okay.	
865	Female Speakers:	Alpino coming too, sir.	SUK
866	Major N:	Okay. Alpino?	ITK
867	Female Speakers:	They're gonna get two aircrafts up in about 15 minutes. South You need another MCC.	TMM, ITK
868	Major N:	Okay. I got him. I need one more maybe. No, wait. I got Jamie here. I'm all set.	ITK
869	Female Speakers:	Well, he's doing the FB. All I'm saying is I can help if you need it.	ITK
870	Major N:	I have to get lan off the floor. He's been on it circumventing my system here.	RTA

871	Major N:	He's not an MC – he's not an MCC, so he needs to stay up there.	RTA
872	Female Speakers:	Okay	MISC
873	Female Speakers:	If you need anything let me know.	MISC
874	Major N:	I will call you directly.	MISC
875	Speaker 1:	Just a heads up. We're gonna have no radios over Chicago. Not even	KT
876	Major N:	Then give them the FAA and then pass all the instructions. Okay. We're getting two from Alpino with guns. Confirm. I'm working that right now. We're getting it.	
877	Sergeant B:	When?	ITK
878	Major N:	In about 15 minutes. Okay. No.	ITK
879	Sergeant B:	We got –	NC
880	Major N:	Okay. We have a deployment out — Springfield F16s are deployed up at Alpino. They're doing like a little exercise up there.	SUK
881	Speaker 16:	Sir.	MISC
882	Major N:	There is? I didn't get that yet. Great.	NC
883	Speaker:	airplane.	NC
884	Major N:	Okay. Where at in Canada? Did they say?	ITK
885	Speaker:		NC
886	Speaker:	This is the location. I'm not –	NC
887	Major N:	You'll call no modes and codes.	ITK
888	Major N:	I need to know cause then I can use my Alpino guys up there.	ITK2
889	Speaker 1:	Any	NC
890	Major N:	I can't help you more than that. Watch it.	NC
891	Speaker 1:	Got it.	MISC
892	Major N:	I can use them over there in the Chicago area. Hey, any possibility of me getting an E3 surveillance? You know where I want them? I want them in the Chicago area cause I got now radios there. Okay.	
893	Speaker 1:	and unknown airport. Could be going to Montreal heading towards Washington	

894	Major N:	No, but I don't have ID of request. I'm got something coming from Canada that says – okay. Unconfirmed reports this aircraft coming from Canada unknown location, don't know if it's squawking, don't know much. It just on surveillance, just keep your eye on him and come from Canada. Okay. We need more here then. Do the northern border thing.	
895	Speaker 13:	·	NC
896	Major N:	I'm running out of scopes.	TSU
897	Speaker 13:	I got the recall list.	MISC
898	Major N:	Okay. Great. Jamie.	MISC
899	Sergeant B:	Yes, sir.	MISC
900	Major N:	Unconfirmed information here on a fifth information here on a fifth airplane coming south from Canada, and don't know modes and codes or a call sign and what airline. And it's supposed to be heading towards Washington so we'll have to just keep an eye on it. Just so you know. It did? Did the Pentagon get whacked? Did it get hit?	ITK2
901	Speaker:		NC
902	Major N:	I don't know. I heard unconfirmed.	ITK2
903	Speaker 1:	I got it unconfirmed.	ITK2
904	Speaker 13:	It's not a good thing, not a good thing at all.	MISC
905	Sergeant B:	Did you guys get unconfirmed information from the battle station of a fifth airplane?	ITK2
906	Major N:	Leaving Canada, unknown departure airport heading towards Washington. Don't know any codes or anything, okay? I got that from Colonel C. I don't know where he got it. Pass this around. Don't know anything. Yeah, give them a call. Give them a call. I got call signs for Atlantic City.	
907	Major N:	Okay. I need call signs also for the Alpino birds, the Toledo birds, and the Suffrage birds. I need all those call signs. If you want to get them from the SB.	
908	Sergeant B:	SB.	MISC
909	Major N:	Okay. Or send somebody – son of a bitch. I need – hey, Foxxy, call signs for Toledo, Suffrage and Alpino guys.	

910	<i>F</i> охху:	I got call signs for Atlantic City over the check	ITK2
911	Speaker 1:	We're gonna have a really hard time confirming these guys. Just get the –	TSU
912	Major N:	I know. They don't look too bad. They don't look too good, but they don't look too bad. That looks like a small aircraft.	VRM
913	Major N:	I mean small. Okay. We need to link with Fort Drum. Is he okay?	VRM, TMM, ITK
914	Speaker 1:	You might get an E3. We're gonna try to get an E3 over Chicago.	TSU
915	Major N:	For your ICCs? Well, I'm gonna try to get an E3 over Chicago because I got no radar and no radios over that airspace, so work them. You know what? Call them. Call Pinker right now. Call command posts and if need be I'll talk to the guy.	
916	Sergeant B:	Get a?	ITK2
917	Major N:	An E3.	ITK2
918	Female Speakers:	Spoke to the commander in battle station. They're gonna final all information through me to you.	
919	Female Speakers:	So I'll make sure you get all the information. You want me to stay down here?	TSU, ITK2
920	Female Speakers:	This is what you got. You're getting 11, and Jamie already knows this. Who's coming from 3Speaker 190.	
921	Major N:	Yes. Right, that's Toledo.	ITK2
922	Female Speakers:	Right. Here's your two from Alpino. They will have guns. Expect them airborne at 1415.	
923	Major N:	That's right. Hit it right there.	VRM
924	Female Speakers:	Okay. Syracuse – there's essentially another aircraft coming out of Canada.	TSU
925	Major N:	Right. I already talked to – I go the number –	TSU
926	Female Speakers:	We want Syracuse to back that up.	COA, SUK
927	Major N:	Got it.	MISC
928	Female Speakers:	List these under airspace.	TSU
929	Female Speakers:	To hold them, and he wants to keep the tanker with us.	TSU

930	Female Speakers:	And we're all –	NC
931	Major N:	Got it. Okay. I got two – two come up on status at Fargo and two at Sioux City.	KT
932	Female Speakers:	Two from Fargo and two from Sioux City.	MISC
933	Major N:	I promised I went above.	NC
934	Female Speakers:	You need it?	ITK2
935	Major N:	Yeah. Yes, FB come up on the highline? Jamie, are you controlling that right now?	RTA, ITK2
936	Sergeant B:	I'm waiting for	ITK2
937	Major N:	Can you come up on the SB still? Come up on the hotline. Fuck. He's got it. I'm blasting his ass. Give me the call sign. Give me the whole nine yards.	
938	Female Speakers:	United.	ITK2
939	Sergeant B:	United 93.	ITK2
940	Major N:	Let me pull up some info real quick. It's got a bomb.	VRM, SUK
941	Sergeant B:	He's going from where to where?	ITK2
942	Major N:	All right. All right. Bomb on board. United 93. Out of Boston? Intercept.	ITK2, COA
943	Sergeant B:	Intercept.	ITK2
944	Major N:	Intercept and divert that aircraft away from. Okay. Do you hear that? That aircraft over the there.	
945	Sergeant B:	Going to Pittsburgh?	ITK2
946	Major N:	Intercept and what else?	ITK2
947	Female Speakers:	It's over Pittsburgh.	ITK2
948	Major N:	Okay. Aircraft over the White House.	ITK2
949	Speaker 1:	United 93. Bomb on board.	ITK2
950	Major N:	Nope, not yet.	NC
951	Speaker 1:	United 93.	ITK2
952	Female Speakers:	United 93.	IKT2
953	Major N:	How close are you to intercept? What is it? Type.	ITK2
954	<i>Foxxy:</i>	They're right on it right now. They're going in now.	ITK2

955	Major N:	They're going in right now.	ITK2
956	Female Speakers:	What's the preliminary?	NC
957	Female Speakers:	Found bomb on board United 93.	ITK2
958	Speaker 1:	We don't have a position on it.	TSU
959	Major N:	Got it. Yes. Do you have any squawks – squawks or anything? Squawks.	ITK2
960	Speaker:	Yes.	ITK2
961	Major N:	You have a squawk or anything like that? Jamie, any words? Jamie?	ITK2
962	Sergeant B:	No.	ITK2
963	Major N:	That might be the fifth airplane.	IMM, VRM
964	Speaker 1:	l've had better days.	MISC
965	Female Speakers:	1527 mode 3.	ITK2
966	Major N:	1527 mode 3. We got a track number? 1527 mode 3, got a track number?	ITK2
967	Female Speakers:	That's what I'm seeing.	ITK2, VRM
968	Major N:	Okay. We got a mode 3 on this United 93. How close are you?	TMM2, ITK2
969	Speaker 13:	1527 mode 3.	ITK2
970	Major N:	I'm just writing it down. 3951 north.	VRM
971	Female Speakers:	07846 west.	VRM
972	Major N:	07846 west.	MISC
973	Female Speakers:	This is the guy with the bomb on board.	TMM2, VRM
974	Major N:	Got it.	TMM2, VRM
975	Sergeant B:	I just got off the phone with the Colonel	NC
976	Major N:	Let's hear it.	MISC
977	Sergeant B:	He has one E3 that's on its way out here.	SUK
978	Major N:	Toledo was what form? I need a track number. Okay. Ian, what happened – two Syracuse birds will be airborne in less than 20 minutes.	KT
979	Sergeant B:	bomb on going towards Pittsburgh. Mode 3 1527?	TMM2

980	Major N:	Any weapons.	ITK2
981	Sergeant B:	We don't know.	ITK2
982	Speaker 13:	Do we have anybody on the aircraft with the bomb on it?	ITK2
983	Major N:	We're getting to it. We don't know where it is, so we getting tracking. Yeah. Okay. Got it.	
984	Sergeant B:	United 93 mode 3 1527.	MISC
985	Major N:	Negative clearance to shoot. Jamie.	COA, SUK
986	Sergeant B:	1527 Brian.	NC
987	Major N:	God damn it. Foxxy, I'm not really worried about code words at this point. Fuck the code words that's perishable information. Negative clearance to fire.	
988	Foxxy:		NC
989	Major N:	ID, type, tail.	ITK2
990	Sergeant B:	Let you guys know also that –	SUK
991	Speaker 1:	Now, we're flying for MCCs right now. Hey – you don't want to wreck the blue skin?	TSU
992	Major N:	No, I just told them that. I told them no. Okay. Where's my bomb? Where's my bomber at?	
993	Female Speakers:	Position of New York and now this is –	ITK2
994	Speaker 1:	Okay. Over Cleveland?	ITK2, VRM
995	Major N:	He's over York, over there. Right there.	VRM
996	Speaker 3:	Delta 89 bravo track	NC
997	Major N:	Sir, how you doing, Major?	MISC
998	Major N5:	Well, I'm doing as good as can be expected. I've got guys who will be launching in about 15 minutes.	
999	Major N:	Appreciate it. Are they loaded?	ITK2
1000	Major N5:	We've got hot guns. That's all I got.	ITK2
1001	Major N:	Hot guns. Well, that's good enough for me for the time being. Only words I got – I got another possible aircraft with a bomb onboard. It's in Pennsylvania York approximate area?	
1002	Major N5:	Yeah, that's south.	TSU
	Major N:	Yeah, that's south of us, and there's also the possibility of – where is that guy? Where is that other guy the special? He turned back over the lake? No the other	ITK2, VRM

		lake. Lake Erie.	
1004	Major N5:	Okay.	MISC
1005	Major N:	Right there. Another one that's possibly at Cleveland area -	VRM, TSU
1006	Major N5:	Okay. Do you have vectors on those?	ITK2
1007	Major N:	Not yet. Looks one's – the one over Cleveland turned around, and it looks like he's heading back to the east. The guy down at York, Pennsylvania, he's heading up north, northwest.	
1008	Major N5:	Okay. We might be able to get those two.	TSU
1009	Major N:	Yeah, and the call sign for the guy in York is United 93.	TSU
1010	Sergeant B:	Mode 3.	IKT2
1011	Major N:	Mode 3 of 1527.	ITK2
1012	Major N5:	Okay. It doesn't help us within a target.	TSU
1013	Major N:	Yeah, I got – sorry. Okay. And I got this other guy out west. He's American – where's that guy? Excuse me for Cleveland. Okay. I got one who just faded over Cleveland Delta 89er, mode 3, and I know it's not gonna help you, but if you're talking to FA, they might be able to help you. We have 1304.	
1014	Major N5:	Okay. When we get our guys airborne, they're gonna contact you on 260.9. I've got two jets right now. Do you need more than two?	
1015	Major N:	Can you bring up two more?	FI
1016	Major N5:	I can get four sent up, yep. Yep.	FI
1017	Major N:	Okay. Thank you, sir, and if you want to talk to Colonel M, he's up at – what's Colonel Ms number?	
1018	Foxxy:	6403	MISC
1019	Major N:	6403, sir.	MISC
1020	Major N5:	Thank you. I don't –	MISC
1021	Major N:	Thank you. Out. Okay. I'm gonna have four out of Syracuse.	
1022	Female Speakers:	Okay. Who's doing the – he's going with Syracuse; right?	ITK2

1023	Major N:	List sheets under. Surveillance did you find that track? Okay. Jamie, right there.	RTA, ITK2, VRM
1024	Sergeant B:	No, the mode 3 I gave you coming out of Canada. Did you find that track?	ITK2, VRM
1025	Female Speakers:	These three gave up on track the last position as a hijack on the	VRM, TMM2
1026	Major N:	And that –	NC
1027	Female Speakers:	You guys need to track that point. I want to make sure it came in.	RTA
1028	Speaker 13:	93 is down northeast of Camp David. That's the one with the bomb onboard.	SUK
1029	Major N:	He's down? A crash or –	ITK2
1030	Sergeant B:	I think so.	ITK2
1031	Major N:	93 that was the guy that was –	ITK2
1032	Sergeant B:	With the bomb on board.	ITK2
1033	Female Speakers:	You lost the mode 3 on it.	ITK2
1034	Major N:	Okay. This is – Okay. I need this point – hey, Sam. I need this –	VRM
1035	Speaker:	United 93 is on the ground.	SUK
1036	Speaker:	on the ground.	MISC
1037	Female Speakers:	The one that's northeast of Camp David is confirmed, the one with the bomb. United 93.	
1038	Major N:	So I think another – exploded.	SUK
1039	Speaker 1:	It exploded.	TSU
1040	Sergeant B:	it exploded.	TSU
1041	Major N:	Yeah, E3 sort of –	NC
1042	Major N4:	Huntress 40 is heading to the northeast some place.	SUK
1043	Major N4:	We have them heading up towards Chicago.	TSU
1044	Major N4:	Also waiting for two more on immediate cause they're waiting for	TSU
1045	Sergeant B:	That's from Boston Center that info?	ITK2
1046	Major N:	Okay. So we got those guys going through and – yeah.	IMM
1047	Female Speakers:	This is making no sense whatsoever.	NC
1048	Female Speakers:	We got Florida called and said –	NC

1049	Female Speakers:	an aircraft out with a possible on it on yours. IF this guy here, well, he working –	
1050	Sergeant B:	You copy that; right?	MISC
1051	Major N:	You got that near Camp David?	ITK2
1052	Female Speakers:	possible on it.	NC
1053	Major N:	Major, go. Yeah, wait a minute. Now you're requesting we have a quit 25, 26 in the NCA area. Quit, quit, Quebec, uniform, India, Tango. Forward tail quit, forward tail quit 25, 26. Come on. We're falling behind on the forward tail stuff. Quit went over in the NCA area. Pick it up.	
1054	Female Speakers:	What happened to this one.	ITK2, VRM
1055	Major N:	He faded over Cleveland.	ITK2
1056	Female Speakers:	Okay. What time did it	ITK2
1057	Major N:	Okay. Say again? Finally. I got three over there. I got 25, 26, and 27. I got three birds there. We just – no, they're at the NCA. I got them flying over the NCA, protecting the NCA as best I can. No. Okay. Bye.	
1058	Female Speakers:	See that guy right there. We cannot get in touch with him. He's working on mode 2. They don't want anybody scrambled on him. He has possible intruder onboard, and they're not sure who.	COA, SUK
1059	Female Speakers:	We cannot contact him, but he's working a mode 2. Right here this guy.	SUK, VRM
1060	Major N:	Right here?	VRM, ITK2
1061	Female Speakers:	Yep. They wanted somebody scrambled on him.	ITK2, SUK
1062	Speaker 1:	They're saying possible intruder, but he part of the mode 2.	TSU
1063	Major N:	Doesn't matter. Okay. Foxxy – Foxxy, we got a problem over in Whiskey 105 area.	TSU, VRM
1064	Major N:	This guy right here. We need fighters on this guy right there.	VRM, COA
1065	<i>Foxxy:</i>	Someone keep calling New York.	RTA
1066	Major N:	There's a possible intruder onboard.	TSU

1067	Foxxy:	We need a check in all areas. New York just called in 4651 –	NC
1068	Major N:	We got a track number on him now?	ITK2
1069	Foxxy:	Probably 424.	ITK2
1070	Major N:	All right. Yeah. That guy right there.	VRM
1071	Speaker 1:	He's heading right into Boston right there.	SUK, VRM
1072	Major N:	Then I have to go through the track information here. Okay. Bravo 001.	TSU
1073	Speaker 1:	Heads up for anybody heading into Boston.	TSU
1074	Sergeant B:	Apparently Track number Bravo 001 is fast moving down towards Boston.	SUK
1075	Foxxy:	Bravo 001 the one said is moving into Boston real quick.	TSU
1076	Major N:	This guy.	VRM, TSU
1077	<i>Foxxy:</i>	Yeah,	TSU
1078	Major N:	No.	TSU
1079	Foxxy:	No, not that guy. Right here.	TSU, VRM
1080	Female Speakers:	He's taking off with that guy that got him.	SUK
1081	Major N:	Okay. He's okay. Don't have – he's good. Okay. We got the information on the one that's fast tracking down to Boston. Where's he at?	·
1082	Speaker 13:	That was the weapons. That was 001.	ITK2
1083	Major N:	Is that it?	ITK2, VRM
1084	Speaker 13:	Bravo 001.	ITK2
1085	Major N:	Right there. He's gone. I don't see him. Wait a minute.	VRM, IMM
1086	Speaker 1:	Now, what? Is that him?	ITK2, VRM
1087	Foxxy:	I got a plug in.	NC
1088	Fохху:	I got four from Syracuse. Two that are cranking right now. I told them to hold two They're coming up. I got a frequency what do you want me to do with them?	
1089	Major N:	Okay. Put them Misty Thunder, Misty Thunder area.	COA
1090	<i>F</i> охху:	Okay. Do you want me to hold the other two –	ITK2
1091	Major N:	No, they're going in a matter of minutes. Yeah. Okay.	ITK2

		T	
1092	Foxxy:	Have they called the fighters out Charleston that we can use?	ITK2
1093	Major N:	No, not yet. This is what we need to do.	ITK2
1094	Female Speakers:	That was –	NC
1095	Speaker 13:	Another possible hijacking.	SUK
1096	Foxxy:	Hold on. Hold on.	MISC
1097	Major N:	Okay. Let's get some –	NC
1098	Speaker 13:	4651	ITK2
1099	Female Speakers:	This guy is behind Go back. Right there. Have no idea who he is.	VRM, IMM
1100	Major N:	I don't see him.	VRM
1101	Female Speakers:	We had our fighters –	NC
1102	Sergeant B:	Just so you know I'm screwed up in the now.	NC
1103	<i>Foxxy:</i>	Scramble 464.	NC
1104	Major N:	No data, huh? Bravo 464.	NC
1105	<i>Foxxy:</i>	Never mind.	NC
1106	Major N:	Bravo 464 been identified as Swordfish 21.	SUK
1107	Foxxy:	Yeah, but who's behind him? There was somebody behind him.	ITK2
1108	Major N:	Okay. We don't have data on the guy behind him.	TSU
1109	Foxxy:	We may just have to put him on unknown.	TSU, VRM
1110	Major N:	Okay. Got that.	TSU
1111	Sergeant B:	I'm trying to get fighters out there.	TSU
1112	Female Speakers:	This should be Can we confirm that? Can we go and talk to him and authenticate him? Because – just because he's – he's got a mode 2. Okay. We're not telling anybody else that we're getting reports.	RTA
1113	Major N:	If he pops up we'll have to treat him as an unknown unless you can identify him; right?	SOG
1114	Foxxy:	It's a rumor. They had mentioned	NC
1115	Major N:	Everybody's accounted for?	ITK2
1116	Female Speakers:	Everybody's accounted for now?	ITK2
1117	Major N:	Did you tell them to park them in an airspace Misty Thunder?	ITK2
1118	Speaker:	Misty Thunder here –	VRM

1119	Major N:	Should be airborne any minute. There were engines running about two minutes ago. Hot gun.	
1120	Sergeant B:	First aide.	NC
1121	Major N:	First aide. Culver 1 and 2.	NC
1122	Foxxy:	Everybody else is airborne when you see 105.	SUK, VRM
1123	Major N:	Got it. How many airplanes? Like four more? Get a number when you can. Okay. Everybody in OTIS that they're generating is gonna get airborne in a minute. Brian, will you let me know when they're airborne?	KT, ITK2
1124	Foxxy:	I think they are now. I'll tell you in a second.	ITK2
1125	Major N:	Weapons just told me that they should be airborne in second. We're not sure how many though. Okay. Got it. Now, do we have a track that's popped up here or no?	ITK2
1126	Foxxy:	No	ITK2
1127	Female Speakers:	Get those three and get some more aircrafts available out of OTIS.	COA
1128	<i>Foxxy:</i>	Great.	MISC
1129	Female Speakers:	Is that a good location?	ITK2, VRM
1130	Speaker 1:	Yeah, this is.	ITK2
1131	Major N:	You could send two over there then. Do you want send two – Foxxy? You had a report of a track behind Swordfish 21. You don't have any data, but I suggest we –	
1132	<i>F</i> охху:	We just scrambled out OTIS and go out there and search low.	SOG
1133	Speaker 1:	Okay. Air Force 1 is airborne out of Florida heading the Washington. We've got those four F16s coming out of Langley with guns only. Two of them will be diverted to escort at the appropriate time.	
1134	Major N:	Okay. We need to plan out Air Force 1. He is airborne now?	RTA, ITK2
1135	Speaker 1:	Yeah, he's airborne now, but he's already gone up there.	ITK2, VRM
1136	Major N:	Have we identified him as a special one.	ITK2
1137	Speaker 1:	We haven't got him.	ITK2
1138	Major N:	So they'll have fighters on him?	ITK2
1139	Speaker:	Hello, this is	MISC

1140   Female   Speakers:   Peah,			1	
1142 Speaker 13: I'm kind working the whatever – whoever – ITK2  1143 Major N: Okay. Air Force 1 is airborne out of Florida MS going to Washington. There should be F15s on them by the time they hit out AOR, but just so you know once Air Force 1 hits our AOR we're gonna have to fighters know their airborne from Florida, President.  1144 Major N: They're going to Washington. This is where MS, VRM I was just at.  1145 Speaker 13: Are they – ITK2  1146 Major N: He had to be putt fighters on it, and then we'll have to take over once they hit our AOR, okay?  1147 Speaker 13: Can we find Air Force 1 and good position COA on him. I don't care how far south he is. We want to know where he's at.  1148 Sergeant B: Right there. That's it. I got too many people VRM, TSU working already.  1149 Major N: Matthew, did you get the Air Force 1 information? ITK2  1150 Speaker 13: What? ITK2  1151 Major N: Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N: And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1: Get everybody that's not on position on RTA post. We're gonna break	1140		Yeah, Have you got any other?	NC
1143 Major N:  Okay. Air Force 1 is airborne out of Florida MS going to Washington. There should be F15s on them by the time they hit out AOR, but just so you know once Air Force 1 hits our AOR we're gonna have to fighters know their airborne from Florida, President.  1144 Major N:  They're going to Washington. This is where MS, VRM I was just at.  1145 Speaker 13:  Are they —  He had to be putt fighters on it, and then VRM, KT she had to put fighters on them. Yeah, and we'll have to take over once they hit our AOR, okay?  1147 Speaker 13:  Can we find Air Force 1 and good position COA on him. I don't care how far south he is. We want to know where he's at.  1148 Sergeant B:  Right there. That's it. I got too many people VRM, TSU working already.  1149 Major N:  Matthew, did you get the Air Force 1 information? ITK2  1150 Speaker 13:  Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N:  And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1:  Get everybody that's not on position on RTA post. We're gonna break	1141	Major N:	Are you working the southeast Langley?	ITK2
going to Washington. There should be F15s on them by the time they hit out AOR, but just so you know once Air Force 1 hits our AOR we're gonna have to fighters know their airborne from Florida, President.  1144 Major N: They're going to Washington. This is where MS, VRM I was just at.  1145 Speaker 13: Are they — ITK2  1146 Major N: He had to be putt fighters on it, and then VRM, KT she had to put fighters on them. Yeah, and we'll have to take over once they hit our AOR, okay?  1147 Speaker 13: Can we find Air Force 1 and good position COA on him. I don't care how far south he is. We want to know where he's at.  1148 Sergeant B: Right there. That's it. I got too many people VRM, TSU working already.  1149 Major N: Matthew, did you get the Air Force 1 info? ITK2  1150 Speaker 13: What? ITK2  1151 Major N: Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N: And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1: Get everybody that's not on position on RTA post. We're gonna break  1154 Major N: It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.	1142	Speaker 13:	I'm kind working the whatever – whoever –	ITK2
I was just at.	1143	Major N:	going to Washington. There should be F15s on them by the time they hit out AOR, but just so you know once Air Force 1 hits our AOR we're gonna have to fighters know	
He had to be putt fighters on it, and then VRM, KT she had to put fighters on them. Yeah, and we'll have to take over once they hit our AOR, okay?  1147 Speaker 13: Can we find Air Force 1 and good position COA on him. I don't care how far south he is. We want to know where he's at.  1148 Sergeant B: Right there. That's it. I got too many people VRM, TSU working already.  1149 Major N: Matthew, did you get the Air Force 1 information? ITK2  1150 Speaker 13: What? ITK2  1151 Major N: Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N: And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1: Get everybody that's not on position on RTA post. We're gonna break  1154 Major N: It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.  1156 Major N: Okay. You got – you got the — NC	1144	Major N:		MS, VRM
she had to put fighters on them. Yeah, and we'll have to take over once they hit our AOR, okay?  1147 Speaker 13: Can we find Air Force 1 and good position COA on him. I don't care how far south he is. We want to know where he's at.  1148 Sergeant B: Right there. That's it. I got too many people VRM, TSU working already.  1149 Major N: Matthew, did you get the Air Force 1 info? ITK2  1150 Speaker 13: What? ITK2  1151 Major N: Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N: And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1: Get everybody that's not on position on RTA post. We're gonna break  1154 Major N: It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.  1156 Major N: Okay. You got – you got the — NC	1145	Speaker 13:	Are they –	ITK2
on him. I don't care how far south he is. We want to know where he's at.  1148 Sergeant B: Right there. That's it. I got too many people VRM, TSU working already.  1149 Major N: Matthew, did you get the Air Force 1 info? ITK2  1150 Speaker 13: What? ITK2  1151 Major N: Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N: And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1: Get everybody that's not on position on PRTA post. We're gonna break  1154 Major N: It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.  1156 Major N: Okay. You got – you got the — NC	1146	Major N:	she had to put fighters on them. Yeah, and we'll have to take over once they hit our	
working already.  1149 Major N: Matthew, did you get the Air Force 1 info? ITK2  1150 Speaker 13: What? ITK2  1151 Major N: Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N: And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1: Get everybody that's not on position on RTA post. We're gonna break  1154 Major N: It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.  1156 Major N: Okay. You got – you got the – NC	1147	Speaker 13:	on him. I don't care how far south he is.	COA
1150 Speaker 13: What?  1151 Major N: Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N: And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1: Get everybody that's not on position on RTA post. We're gonna break  1154 Major N: It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.  1156 Major N: Okay. You got – you got the – NC	1148	Sergeant B:		VRM, TSU
Did you get the Air Force 1 information? ITK2, TSU Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N:  And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1:  Get everybody that's not on position on RTA post. We're gonna break  1154 Major N:  It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B:  Over in New York City I got an additional TSU two coming out.  Okay. You got – you got the –	1149	Major N:	Matthew, did you get the Air Force 1 info?	ITK2
Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters on him by the time they hit our AOR.  1152 Major N:  And we're gonna have to escort them. TSU That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1:  Get everybody that's not on position on RTA post. We're gonna break  1154 Major N:  It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B:  Over in New York City I got an additional TSU two coming out.  Okay. You got – you got the –	1150	Speaker 13:	What?	ITK2
That's right. Is Air Force 1 being pulled in? Okay. Brian, you got Syracuse? Okay.  1153 Speaker 1: Get everybody that's not on position on RTA post. We're gonna break  1154 Major N: It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.  1156 Major N: Okay. You got – you got the – NC	1151	Major N:	Now, we were passed that Air Force 1's airborne from Florida on his way to Washington, so CIAD should have fighters	
post. We're gonna break  1154 Major N: It's probably a good time to do a recap. TSU How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.  1156 Major N: Okay. You got – you got the – NC	1152	Major N:	That's right. Is Air Force 1 being pulled in?	
How many you got out of OTIS? You still got the two that were over in New York City.  1155 Sergeant B: Over in New York City I got an additional TSU two coming out.  1156 Major N: Okay. You got – you got the – NC	1153	Speaker 1:		RTA
two coming out.  1156 <i>Major N:</i> Okay. You got – you got the – NC	1154	Major N:	How many you got out of OTIS? You still	
, , , , ,	1155	Sergeant B:	, ,	TSU
1157 Sergeant B: 11 out of Toledo. NC	1156	Major N:	Okay. You got – you got the –	NC
	1157	Sergeant B:	11 out of Toledo.	NC

1158	Major N:	Quiet it down a little bit. Use your intercom. Okay. You got two out of Toledo, two out of Syracuse. You got –	
1159	Sergeant B:	Four out of Syracuse.	TSU
1160	Major N:	Four out of Syracuse?	TSU
1161	Sergeant B:	Yep, four out of Syracuse.	TSU
1162	Major N:	You told them to just get a few up. They want all four up?	TSU
1163	Sergeant B:	Out of Toledo? Singer – Cobra.	TSU
1164	Major N:	You want all four?	ITK2
1165	Sergeant B:	They're the only one that got four.	ITK2
1166	Major N:	Okay. You told them that? Okay.	NC
1167	Sergeant B:	Okay.	NC
1168	Major N:	Toledo's got two, but I'm not sure how many	NC
1169	Sergeant B:	Alpino's got two.	NC
1170	Major N:	They're coming?	NC
1171	Sergeant B:	Yeah.	NC
1172	Speaker 1:	There's more than one aircraft coming over – keep a search and note the guy that ————.	
1173	<i>Foxxy:</i>	Do we know who they are?	ITK2
1174	Major N:	No, I have no clue. That's not the weapons. That's not the weapons?	ITK2
1175	Sergeant B:	No.	ITK2
1176	Speaker 1:	Langley is –	NC
1177	Major N:	Jamie, track number CR213.	SUK
1178	Sergeant B:	I'm so sorry.	MISC
	Major N:	Go ahead. Go ahead. Track number CR213 on the border. There's a bunch of airplanes there. Don't know what it is, so somebody's gonna have to check that out.	VRM
1180	Sergeant B:	That's quite a way out.	TSU
1181	Foxxy:	Cleveland, line 2.	MISC
1182	Sergeant B:	Can I help you?	MISC
1183	Major N:	Okay. You need to read this. commander has declared that we can shoot down tracks that do not respond to our –	
1184	Sergeant B:	Okay?	MISC
110E	Major N:	Okay. That's not the weapons?	ITK2

1186	<i>Foxxy:</i>	That's what we want to see airborne.	TSU
1187	Major N:	Okay. How many FD you got going? Two FDs?	ITK2
1188	Foxxy:	Yeah, they're They're fucking with me.	NC
1189	Major N:	The reason commander has declared that we can shoot down aircrafts that do not respond to our direction. Okay? Did you copy that?	
1190	<i>Foxxy:</i>	Copy that, sir.	MISC
1191	Major N:	So if you're trying to divert somebody and he won't divert.	KT
1192	Speaker:	Atlantic City scrambled 1330.	SUK
1193	Major N:	You guys are gonna upload with heaters and slammers. Okay. Let's get the –	ITK2
1194	Major N:	Yeah, we go a lot of tankers. Don't worry about that.	TSU
1195	Foxxy:	PO's saying no.	ITK2
1196	Major N:	No? It came over the chat. Man, I'm kind of rushed right now. I've got all kinds of things going on. I'll try to get somebody to get to you, okay? Foxxy, you got a conflict on that?	ŕ
1197	Foxxy:	What's that?	ITK2
1198	Major N:	You got a conflict on that direction.	ITK2
1199	Foxxy:	Right now, no, but –	ITK2
1200	Major N:	Okay. How many aircrafts at Atlantic City?	ITK2
1201	Speaker 1:	You read that from the Vice President; right?	TSU
1202	Major N:	Vice President has cleared us to shoot them down if they do not respond through sonar CT. If that's weapons –	
1203	Speaker 1:	Okay.	MISC
1204	Major N:	I will pass it then to the MCC.	MISC
1205	Speaker 1:	Well –	NC
1206	Major N:	MCC I have a check at E3. How many aircrafts just got off of Atlantic City?	SUK, ITK2
1207	Speaker 13:	Supposedly four, but I don't know if they're airborne yet.	ITK2
1208	Major N:	Four. Scramble PAT.	COA
1209	Major N:	Okay. Do you have a call sign?	ITK2
1210	Sergeant B:	I got another E3. He was already airborne out at	TSU

1211	Sergeant B:	cause they need to know where he wants to go – where we want him to go? If I get a hold of somebody, I got to kind of make the decision.	
1212	Major N:	Okay. Have we got somebody prosecuting this track – remember that – behind Swordfish?	
1213	Sergeant B:	Make sure pick up the kids tonight, Mike.	NC
1214	Major N:	I'll tell her, yeah. Thanks, Grover. We got a coming over the ocean. Hey, Brian, you got 24 – what the hell – what's this mass tracking? What's this mass tracking?	VRM
1215	Female Speakers:	If they're heading to Bangor. What are they doing down here?	ITK2, VRM
1216	Female Speakers:	They're heading the wrong way for Bangor.	TSU
1217	Major N:	No shit. I need to –	MISC
1218	Female Speakers:	Well, then that is supposed to be going to Bangor.	TSU
1219	Speaker:	They're heading the wrong way.	TSU
1220	Female Speakers:	They're not heading to Bangor, and they will not answer our communication.	KT
1221	Speaker 13:	Once you get the tanker you've bingo to Langley at 1830.	COA
1222	Major N:	Okay. They're working tanker support from my understanding.	TSU
1223	Foxxy:	Yes, they are.	TSU
1224	Major N:	Okay. You're challenging that Mac truck there; is that what you're doing?	ITK2, VRM
1225	Female Speakers:	Yeah.	ITK2
1226	Major N:	Okay. Can you determine which referencing was searching out behind 21 and just give me a status on that?	ITK2, RTA
1227	Female Speakers:	I just want to let you know that we had a04 that landed.	KT
1228	Major N:	Okay. All right. Have they responded to a radio call?	ITK2
1229	Female Speakers:	One on Team 04.	ITK2
1230	Major N:	But has anybody talked to them, and do they have weapons of any sort?	ITK2

1231 Sergeant B: Let me know about on that ITK2 1232 Foxxy: 43 ITK2 1233 Major N: Yeah, 043. Okay. They're searching that one down. 1234 Female Speakers: 1235 Major N: Okay. You got four A10s and ITK2 1236 Foxxy: Got it. MISC 1237 Speaker 1: Okay. So we need to – they might be getting diverted. 1238 Major N: By? ITK2 1239 Speaker 1: Can A10 hang with the KC10s? ITK2 1240 Speaker: Standby. MISC 1241 Sergeant B; That's a lot of tail, and they're going into a head wind. 1242 Major N: This guy's never been out of Andrews as ITK2 well? 1243 Sergeant B: What's that? ITK2 1244 Major N: Is there's guy out at Andrews as well? ITK2 1245 Sergeant B: My guess is FHA is letting us do it. ITK2 1246 Major N: Under our control? Are they airborne? ITK2 1247 Sergeant B: I don't know. 1TK2 1248 Major N: Oh, okay. We have fighters down at Andrews under our control? Conar's	
1233 Major N:  Yeah, 043. Okay. They're searching that ITK2 one down.  1234 Female Speakers:  No, nothing yet. It's gonna be the front load. ITK2 Speakers:  1235 Major N:  Okay. You got four A10s and ITK2  1236 Foxxy:  Got it.  MISC  1237 Speaker 1:  Okay. So we need to – they might be SUK getting diverted.  1238 Major N:  By?  ITK2  1239 Speaker 1:  Can A10 hang with the KC10s?  ITK2  1240 Speaker:  Standby.  MISC  1241 Sergeant B;  That's a lot of tail, and they're going into a SUK head wind.  1242 Major N:  This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B:  What's that?  ITK2  1244 Major N:  Is there's guy out at Andrews as well?  ITK2  1245 Sergeant B:  My guess is FHA is letting us do it.  ITK2  1246 Major N:  Under our control? Are they airborne?  ITK2  1247 Sergeant B:  I don't know.  ITK2	
one down.  1234 Female Speakers:  1235 Major N:  Okay. You got four A10s and ITK2  1236 Foxxy:  Got it.  MISC  1237 Speaker 1:  Okay. So we need to – they might be SUK getting diverted.  1238 Major N:  By?  ITK2  1239 Speaker 1:  Can A10 hang with the KC10s?  ITK2  1240 Speaker:  Standby.  That's a lot of tail, and they're going into a SUK head wind.  1242 Major N:  This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B:  What's that?  ITK2  1244 Major N:  Is there's guy out at Andrews as well?  ITK2  1245 Sergeant B:  My guess is FHA is letting us do it.  ITK2  1246 Major N:  Under our control? Are they airborne?  ITK2  1248 Major N:  Oh, okay. We have fighters down at ITK2	
Speakers:   Okay. You got four A10s and   ITK2	
1236 Foxxy: Got it. MISC 1237 Speaker 1: Okay. So we need to – they might be SUK getting diverted.  1238 Major N: By? ITK2 1239 Speaker 1: Can A10 hang with the KC10s? ITK2 1240 Speaker: Standby. MISC 1241 Sergeant B; That's a lot of tail, and they're going into a SUK head wind.  1242 Major N: This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B: What's that? ITK2 1244 Major N: Is there's guy out at Andrews as well? ITK2 1245 Sergeant B: My guess is FHA is letting us do it. ITK2 1246 Major N: Under our control? Are they airborne? ITK2 1247 Sergeant B: I don't know. ITK2 1248 Major N: Oh, okay. We have fighters down at ITK2	
1237 Speaker 1: Okay. So we need to – they might be SUK getting diverted.  1238 Major N: By? ITK2  1239 Speaker 1: Can A10 hang with the KC10s? ITK2  1240 Speaker: Standby. MISC  1241 Sergeant B; That's a lot of tail, and they're going into a SUK head wind.  1242 Major N: This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B: What's that? ITK2  1244 Major N: Is there's guy out at Andrews as well? ITK2  1245 Sergeant B: My guess is FHA is letting us do it. ITK2  1246 Major N: Under our control? Are they airborne? ITK2  1247 Sergeant B: I don't know. ITK2  1248 Major N: Oh, okay. We have fighters down at ITK2	
getting diverted.  1238 Major N: By? ITK2  1239 Speaker 1: Can A10 hang with the KC10s? ITK2  1240 Speaker: Standby. MISC  1241 Sergeant B; That's a lot of tail, and they're going into a SUK head wind.  1242 Major N: This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B: What's that? ITK2  1244 Major N: Is there's guy out at Andrews as well? ITK2  1245 Sergeant B: My guess is FHA is letting us do it. ITK2  1246 Major N: Under our control? Are they airborne? ITK2  1247 Sergeant B: I don't know. ITK2  1248 Major N: Oh, okay. We have fighters down at ITK2	
1239 Speaker 1: Can A10 hang with the KC10s? ITK2 1240 Speaker: Standby. MISC 1241 Sergeant B; That's a lot of tail, and they're going into a SUK head wind.  1242 Major N: This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B: What's that? ITK2 1244 Major N: Is there's guy out at Andrews as well? ITK2 1245 Sergeant B: My guess is FHA is letting us do it. ITK2 1246 Major N: Under our control? Are they airborne? ITK2 1247 Sergeant B: I don't know. ITK2 1248 Major N: Oh, okay. We have fighters down at ITK2	
1240 Speaker: Standby. MISC 1241 Sergeant B; That's a lot of tail, and they're going into a SUK head wind.  1242 Major N: This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B: What's that? ITK2 1244 Major N: Is there's guy out at Andrews as well? ITK2 1245 Sergeant B: My guess is FHA is letting us do it. ITK2 1246 Major N: Under our control? Are they airborne? ITK2 1247 Sergeant B: I don't know. ITK2 1248 Major N: Oh, okay. We have fighters down at ITK2	
1241 Sergeant B; That's a lot of tail, and they're going into a SUK head wind.  1242 Major N: This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B: What's that? ITK2  1244 Major N: Is there's guy out at Andrews as well? ITK2  1245 Sergeant B: My guess is FHA is letting us do it. ITK2  1246 Major N: Under our control? Are they airborne? ITK2  1247 Sergeant B: I don't know. ITK2  1248 Major N: Oh, okay. We have fighters down at ITK2	
head wind.  1242 Major N: This guy's never been out of Andrews as ITK2 well?  1243 Sergeant B: What's that? ITK2  1244 Major N: Is there's guy out at Andrews as well? ITK2  1245 Sergeant B: My guess is FHA is letting us do it. ITK2  1246 Major N: Under our control? Are they airborne? ITK2  1247 Sergeant B: I don't know. ITK2  1248 Major N: Oh, okay. We have fighters down at ITK2	
well?  1243 Sergeant B: What's that? ITK2  1244 Major N: Is there's guy out at Andrews as well? ITK2  1245 Sergeant B: My guess is FHA is letting us do it. ITK2  1246 Major N: Under our control? Are they airborne? ITK2  1247 Sergeant B: I don't know. ITK2  1248 Major N: Oh, okay. We have fighters down at ITK2	
1244 Major N: Is there's guy out at Andrews as well? ITK2 1245 Sergeant B: My guess is FHA is letting us do it. ITK2 1246 Major N: Under our control? Are they airborne? ITK2 1247 Sergeant B: I don't know. ITK2 1248 Major N: Oh, okay. We have fighters down at ITK2	
1245 Sergeant B: My guess is FHA is letting us do it. ITK2 1246 Major N: Under our control? Are they airborne? ITK2 1247 Sergeant B: I don't know. ITK2 1248 Major N: Oh, okay. We have fighters down at ITK2	
1246 <i>Major N:</i> Under our control? Are they airborne? ITK2 1247 <i>Sergeant B:</i> I don't know. ITK2 1248 <i>Major N:</i> Oh, okay. We have fighters down at ITK2	
1247 Sergeant B: I don't know. ITK2 1248 Major N: Oh, okay. We have fighters down at ITK2	
1248 <i>Major N:</i> Oh, okay. We have fighters down at ITK2	
asking? No.	
1249 Female Speakers: I just picked up scrambling right now. SUK	
1250 Major N: Scrambling?	
1251 Female Yes. ITK2 Speakers:	
1252 <i>Major N:</i> They'll come under our control then? Okay. IMM	
1253 Female Someone needs to push your chair in. NC Speakers:	
1254 Major N: I've been standing. I don't sit during this. NC	
1255 Sergeant B: They're on their way now.	
1256 Speaker 15: First 124 is headed to the Washington area SUK now.	
1257 Major N: I'm set. NC	
1258 <i>Foxxy:</i> ay. See that 542? VRM	
1259 Foxxy: fety zone there to deposit some ITK2	

1260	<i>Foxxy:</i>	l've got Sting refueling right now 071, and he's investigating The reference point with Bravo 083 went down.	
1261	Foxxy:	Having an and investigating that point, and I'm gonna bring them this way.	SUK
1262	Foxxy:	Okay?	MISC
1263	Foxxy:	So that's what's going on.	MISC
1264	Speaker 13:	Where would you like me to put — I'm thinking bring Sting somewhere over here.	SOG, VRM
1265	Major N:	Sting?	SOG, VRM
1266	Speaker 13:	You got Saber going here.	SOG, VRM
1267	Major N:	Saber going there.	SOG, VRM
1268	Speaker 13:	I might actually push Saber over here and get that one.	SOG, VRM
1269	Major N:	Get that one.	RTA, VRM
1270	Speaker 13:	Two out of four is only two out of large cities we can use it at that point.	TSU
1271	Major N:	Yeah, we got two more.	TSU
1272	Speaker 13:	I'm just telling you they're just there available if you need them.	TSU
1273	Major N:	You got two in the scramble pattern at Andrews?	ITK2
1274	Speaker 13:	I can put them at – somebody said the scrambled down in Orlando.	SUK
1275	Major N:	Okay. Okay. Atlantic City airborne yet?	ITK2
1276	Sergeant B:	They're taking off southwest bound to begin what's primary.	ITK2
1277	Major N:	Where at – out of – that's probably JFK right there.	VRM
1278	Sergeant B:	he's going to need tanker support	KT
1279	Sergeant B:	About 1800 he's gonna be based. We got a couple of hours, but –	TSU
1280	Speaker 13:	heading to Washington – he's good till 1800.	TSU
1281	Major N:	Okay. That's good. I got tankers. Foxxy, I got a search only track that this came out of the Suffolk area, JFK area.	
1282	<i>Foxxy:</i>	Uh-huh.	MISC
_			

1283	Major N:	Just made a left-hand turn and just went to aux right over here. So surround this area right here. Right here man, I think that's the track right there. Foxxy, make sure somebody's tracking that area, keep an eye on that guy who went –	RTA
1284	Female Speakers:	There's not control over them.	TSU
1285	Major N:	Okay. They have a bomb threat?	ITK2
1286	Female Speakers:	Yeah, someone called the police	ITK2
1287	Female Speakers:	·	NC
1288	Speaker 13:	Better have somebody check them out.	RTA
1289	Female Speakers:	Have you found anything?	ITK2
1290	Major N:	No.	ITK2
1291	Speaker 13:	As a matter of fact it's	NC
1292	Major N:	It's supposed to be those A10s.	TSU
1293	Speaker 13:	The story we heard is they're coming down and bringing five or six A10s with it.	SUK
1294	Sergeant B:	Refer to coordination. I've got the Washington area split off. Julian's controlling just that area. Him are the two Ps.	RTA, TSU
1295	Major N:	Okay. Good. Also any words on the OTIS guys taking off?	ITK2
1296	Sergeant B:	Yeah, they intercepted the Delta. They're down there right now.	ITK2
1297	Major N:	I've got a mission for them.	TSU
1298	Sergeant B:	ID those guys?	ITKW
1299	Major N:	ID those guys. Merck, remember what I said?	RTA
1300	Female Speakers:	The aircraft that you were looking for don't bother looking for it anymore.	COA
1301	Major N:	Which one/	ITK2
1302	Speaker 1:	The one in Kentucky.	ITK2
1303	Major N:	Where in Kentucky?	ITK2
1304	Speaker 1:	American 77.	ITK2
1305	Major N:	I didn't hear about that one.	TSU
1306	Female Speakers:	They were looking for it.	TSU
1307	Speaker 1:	They were just trying to locate it.	TSU
	•	125	

1308	Major N:	Kentucky? That came from who?	ITK2
1309	Speaker 1:	From FAA on their line.	ITK2
1310	Major N:	American 11 or 77? Also I need you if you could fax – what's the ones that we're using for authentications to scramble aircrafts?	
1311	Foxxy:	The ones.	ITK2
1312	Major N:	No, the real world.	ITK2
1313	Sergeant B:	Oh, that's Speaker 195.	ITK2
1314	Major N:	To scramble aircrafts we use what?	ITK2
1315	Sergeant B:	509	ITK2
1316	Major N:	509. Send copies of 509 just faxing of any 509.	RTA
1317	<i>Foxxy:</i>	The one we have are Speaker 195.	TSU
1318	<i>Foxxy:</i>	We have Speaker 193s and 506s.	TSU
1319	Major N:	506	TSU
1320	Sergeant B:	I'm not gonna doubt your memory. One of the KC10s needs to reserve 50, 000 pounds for	
1321	Major N:	Got it. Check. I want a good link with them.	RTA
1322	Sergeant B:	Good.	MISC
1323	Foxxy:	Are we gonna hit somebody.	ITK2
1324	Major N:	Yea, they're checking.	ITK2
1325	Speaker:	Hey, you got the word on Kentucky?	TSU
1326	Major N:	Yeah, they already know that up there.	TSU
1327	Sergeant B:	l'm not – I don't have a clear picture –	TSU, VRM
1328	Major N:	What do you got? Yeah.	ITK2
1329	Sergeant B:	One with the altitude of 62. the other aircraft are south, we can't talk to anybody.	KT
1330	Major N:	I just sent what's her name up there – Patty. She just said they're getting good code on it and everything. I already called it in once, and I had to go up and talk to Major	
1331	Sergeant B:	I mean we're not 50 miles –	NC
1332	Major N:	Okay. ACMP – I'll get it. I'll just point them out to you. Search target – whelp, it looks like it might have faded now again. What was the check number? 614, I'll send the attention out again.	TSU
1333	Speaker 19:	Hey, Tim, how long have you been sitting?	ITK
1334	Tim:	Probably about 40 minutes.	ITK
1335	Speaker 19:	Okay.	ITK

1336	Tim:	Just give me a shout if nobody comes back to relieve you. Okay?	RTA
1337	Speaker 19:	All right.	MISC
1338	Major N:	Product 614 the NCA are there's a sign, so go and investigate that.	VRM, COA
1339	Sergeant B:	I want to make sure we don't call everybody in.	MISC
1340	Major N:	Hey Sue. Is Sue doing anything right now?	ITK
1341	Sergeant B:	No, not that I know of.	ITK
1342	Major N:	I need for tom to do some phone calls.	MISC
1343	Sergeant B:	Hey, you got a Main 92 just south of that.	VRM
1344	Major N:	Set up this please. Yeah. The CPA head that's fine. That's all I need to have. Okay. I need to call Control, in chat, and tell Patty that we're still having problems with 62. If there's a convenient way to stay in contract with 62. Yeah. Who you talking to?	ITK2
1345	Speaker 1:	62	ITK2
1346	Major N:	I'm sending them up there. 50 miles south. Not good enough.	KT
1347	Sergeant B:	You gonna get an active point where Foxtrot going out there –	ITK2
1348	Major N:	The OTIS guys. Charlie, Foxtrot?	ITK2
1349	Major N:	What time? Okay 1415. Okay. Go ahead whoever's calling the FT.	ITK2, RTA
1350	Sergeant B:	All right. Thanks.	MISC
1351	Speaker 1:	Right now, they our efforts to divert them.	KT
1352	Major N:	Okay. Let me get a role call of who's where?	TMM2
1353	Speaker 1:	They won't respond to hand signals.	SUK
1354	Major N:	Okay. Wait a minute. Tim, let's go beyond. And you're watching the DC; right? Okay. Jennings has got New York, the six.	
1355	Tim:	The MCC.	NC
1356	Major N:	Okay. What else do we got here. Junabi, what do you got?	TMM2
1357	Speaker 1:	We're inbound on them.	TMM2
1358	Major N:	I think they're dong the area, aren't they?	TMM2
1359	Female Speakers:	Yeah, they're doing the area.	TMM2

1360	Major N:	Holy shit. All right. Who else we got? And Jeff's doing – Jeff's watching where? Cleveland or he's watching LS?	
1361	Female Speakers:	Yeah, he's watching the area.	TMM2
1362	Major N:	Okay. 1011 what areas do you have? Okay.	TMM2
1363	Speaker:	he's over water.	TMM2
1364	Sergeant B:	I need call signs from the BSL.	TMM2
1365	Major N:	You got Boston? Okay. Gotcha. Know from this guy. Where these are coming from? We can find all this out. Where these guys are coming from and where they're supposed to be going? Call this No, if they send them call me back. Call their command post. Yeah.	VRM, RTA
1366	Sergeant B:	Okay. I got a problem.	TSU
1367	Speaker 1:	You can tell when exactly.	TMM2
1368	Major N:	Right. At this time yes.	TMM2
1369	Sergeant B:	I got a problem.	TSU
1370	Major N:	Where's he heading?	ITK2
1371	Female Speakers:	To the west.	ITK2
1372	Sergeant B:	Main 92, I didn't know how much leeway we had –	TSU
1373	Major N:	Oh, they could be taking a different flight plan you know.	KT
1374	Sergeant B:	Like at 80,000 –	TSU
	Major N:	I got to go talk to Colonel M and give him all the update on what's gong on.	
1376	Sergeant B:	I know I need him to refuel team 21.	RTA
1377	Major N:	Can you see if this is up to snuff –	MISC
1378	Sergeant B:	Yep, team 21 it's right there. Okay. Yeah, yeah,, it's right there. Thank you. Main 92 has 80,000 pounds of fuel. We're gonna — yep, we're gonna try to get Main 92 right now to go to team 21.	FI
1379	Major N:	That's a good call.	FI
1380	Sergeant B:	I need to talk to Pittsburgh.	MISC
1381	Recorded Voice:	The person at extension 4747347 –	MISC
1382	Sergeant B:	Go walk down there.	NC
1383	Sergeant B:	Yes, sir. This is huntress calling.	MISC
		120	

1384	Speaker;	Yes.	MISC
1385	Sergeant B:	Hey, you guys are having a problem getting one of your planes off the ground.	ITK2
1386	Speaker:	Well, we have one airborne.	ITK2
1387	Sergeant B:	You have one airborne and the other one's won't let it take off?	ITK2
1388	Speaker:	That I don't know.	ITK2
1389	Sergeant B:	CO72.	NC
1390	Speaker:	Let me transfer you to the front desk.	MISC
1391	Sergeant B:	All right. Thanks. Okay.	MISC
1392	Recorded voice:	The person at extension 4747347 is on the phone. Thank you for calling the line of Operation Desk. At this time there's no one available to take your call. If you leave your name, number and a brief message, we'll be happy to call you back. If you need to speak to someone right away or to leave an important message —	
1393	Major N:	Right the destination unknown right?	ITK2
	Female Speakers:	Really quickly –	NC
1395	Major N:	Do a fly by and then determine if they're friendly and do they have weapons	COA
1396	Female Speakers:	Park western intersection –	NC
1397	Major N:	Yeah, the second tower went; right?	ITK2
1398	Female Speakers:	Yeah.	IKT2
1399	Major N:	Unbelievable. What's that? I'd rather you didn't cause I'm waiting for call back for – yeah, I saw that. It's been up there for a bit. Look at that. They got the gates down do they? Fuck.	
1400	Female Speakers:	what areas are you looking at?	VRM, ITK2
1401	Major N:	I'm watching the whole thing.	ITK2
1402	Female Speakers:	Watching the whole thing.	ITK2
1403	Sergeant B:	Sergeant Swept, it's Sergeant B. Is this the SB? This is the SB position.	ITK2
1404	Captain S:	This is Captain S from Footrope.	MISC
1405	Sergeant B:	Okay.	MISC

1406	Captain S:	Hey, we got a track in our system on a code of 1545, just wondering if you guys have seen him. Cause I know I'm not making that up yet.	
1407	Sergeant B:	1545?	ITK2
1408	Captain S:	Yeah.	ITK2
1409	Captain S:	I'm on the 12 loop.	ITK2
1410	Sergeant B:	It's located 1545.	ITK2
1411	Captain S:	You did?	ITK2
1412	Sergeant B:	No, I'm looking.	ITK2, VRM
1413	Captain S:	Okay. Right now he's just southeast of looks like New York City there, southeast –	ITK2, VRM
1414	Sergeant B:	Southeast of New York City.	ITK2
1415	Captain S:	He's right on the corner of Whiskey 105, the eastern corner – correction, the western corner.	ITK2, VRM
1416	Sergeant B:	All right. Yeah, I see him.	VRM
1417	Captain S:	You got him?	ITK2
1418	Sergeant B:	Yeah, hold on.	ITK2
1419	Major N:	that's cap that's cap	VRM, ITK2
1420	Sergeant B:	1545 at 17,000.	ITK2
1421	Captain S:	Yeah, I just wanted to make sure you guys had him.	KI
1422	Sergeant B:	Okay. What about him?	KI
1423	Captain S:	We don't want to mix that up yet.	KI
1424	Sergeant B:	Yeah, what about him?	KI
1425	Captain S:	Well, I know no one's supposed to fly and people are supposed to get slammed and stuff. I just wanted to make sure you guys have a heads up.	
1426	Sergeant B:	All right. But he's friendly?	KI
1427	Captain S:	What's that?	KI
1428	Sergeant B:	He's a friendly.	KI
1429	Captain S:	I understand he's friendly, but what's going on with the incident in New York.	KI
1430	Captain S:	No airplanes are supposed to fly.	KI
1431	Sergeant B:	Oh, okay, so you want us to check that aircraft out.	KI
1432	Captain S:	No, I don't want you to go intercept him or anything. I'm just giving you a heads up that he's there.	
1433	Sergeant B:	Okay. But you don't have a call sign?	ITK2
			MISC

1435	Sergeant B:	You don't have a call sign?	ITK2
1436	Captain S:	No, I'm not talking to him. I just we're looking at our radar and we saw him.	ITK2, VRM
1437	Captain S:	He came from Rhode Island area, and –	SUK
1438	Sergeant B:	All right. He's got two in trail of him also. Okay. Thanks Bye.	KT
1439	Captain S:	All right.	MISC
1440	Major N:	Hey, Jeff, you got a call from the Cleveland area. They wanted to know what staff is gonna be working in the area. You need to make sure that –	
1441	Sergeant B:	Okay. All right. Weapons, Sergeant B.	MISC
1442	Fохху8:	Hi, Sergeant, is Major Potter available to do work now?	ITK2
1443	Sergeant B:	Yeah, he's very busy.	ITK2
1444	Foxxy8:	Okay. Well, listen. No, I'm not – I just wanted to make sure he was okay.	MISC
1445	Sergeant B:	Okay. Yeah, he's real busy and I'll give him a message.	MISC
1446	Foxxy8:	It's okay. I'm home. Just tell him I called.	MISC
1447	Sergeant B:	Okay. Ma'am.	MISC
1448	Foxxy8:	Thank you. Bye.	MISC
1449	Sergeant B:	Bye.	MISC
1450	Major N:	Bravo 633. Bravo 636, Bravo 635.	ITK2
1451	Sergeant B:	l just told you that.	ITK2
1452	Speaker:	We don't know who it is, but Washington seems to know it's military working with us.	ITK2
1453	Sergeant B:	Huntress say again?	MISC
1454	Speaker:	We don't know –	ITK2
	Major N:	that 366 – no, 636. My attention on them again. There's two tracks right there, and then west of that there's another one. MCC Major	
1456	C. L. :	Hey, this is C. L	MISC
1457	C. L. :	Calling in. I got a phone call to call the MCC. I don't have the MCCs number, but I was notified that I needed to call in and let you guys know that I'm alive and well and at my home.	
1458	Major N:	Okay. All right. I'll pass that on.	MISC
1459	C. L. :	Yep. Who's – is this Russ?	MISC
1460	C. L. :	Okay. Yep. Thanks, Russ.	MISC

4 4 5 4		V 1 01 D 0	01.114
1461	Major N:	Yeah. Okay. Bye. Can you pass on to the MCC that whoever was doing the recall that C. L. just called in? He's checking in from the recall roster. I got two more tracks over NCA.	
1462	Speaker 13:	Go to Bangor.	SUK
1463	Major N:	Yeah, I see that. They stopped squawking like a minute or two ago.	VRM, TSU
1464	Sergeant B:	Okay. Weapons notified.	TSU
1465	Major N:	We got it. Okay. Foxxy, I got – hey, we have two tracks right now of interest. You been telling them targets –	
1466	Sergeant B:	that we confirm.	NC
1467	Major N:	Okay. 633, 636. Got it.	TSU
1468	Female Speakers:	Try not to yell.	MISC
1469	Major N:	Is it bad for you – Cleveland Center.	MISC
1470	<i>Foxxy:</i>	Going to 701 of the area –	TSU
1471	Major N:	Okay. This guy here Bansaw Kilo.	TSU, VRM
1472	Major N:	On whiskey 701. Okay. I'm letting the weapons guys deal with hit. They're doing it. They're logged, but they're not. The Bansaw kilo? Okay. Bansaw kilo active –	
1473	Sergeant B:	Can you get up to Bell cap.	NC
1474	Major N:	!450 and he is gonna orbit at – off of whiskey 701.	KT
1475	Sergeant B:	Want me to fill you in?	MISC
1476	Major N:	Hold on.	MISC
1477	Female Speakers:	What are the ideas – looks like they're breaking off.	VRM, SUK
1478	Sergeant B:	Man, I got to pee.	NC
1479	Tim:	American Airlines	NC
1480	Sergeant B:	Get the fuck out.	NC
1481	Major N:	Also what's the information on the intercept over Boston?	ITK2
1482	Speaker 30:	Hi, is Ron B around.	MISC
1483	Sergeant B:	Yeah, this is me.	MISC
1484	Speaker 30:	Hi, you okay?	MISC
1485	Sergeant B:	Yeah, I'm busy.	MISC
1486	Speaker 30:	Are you?	MISC
1487	Speaker 30:	All right. Call me, okay?	MISC
1488	Sergeant B:	Okay. Bye.	MISC

1489	Speaker 30:	Bye.	MISC
1490	Speaker 21:	Calling huntress. Say again complete call from?	ITK2
1491	Speaker 13:	This is caps 2 on 234.6.	ITK2
1492	Speaker 21:	Caps 2 copy out. What's our code 3 and intention?	ITK2
1493	Speaker 16:	Huntress, huntress, 23 heavy.	ITK2
1494	Sergeant B:	Team 23 huntress. Standby.	MISC
1495	Team 23	We got a request of they want us overhead Andrews.	ITK2
1496	Sergeant B:	Request approved.	ITK2
1497	Major N:	Tell them right now we have intercept authority.	KT
1498	Sergeant B:	Team 23 we have approved as request?	ITK2
1499	Team 23:	Thank you.	MISC
1500	Major N:	We didn't get anything from caps.	TSU
1501	Sergeant B:	Caps 2 huntress.	MISC
1502	Major N:	I have a mission for them if you'd like to – if you can pass it Go ahead. They're gonna be refueling on Century 40. The mission crew is Bansaw Kilo.	
		CIEW IS Dalisaw Kilo.	
1503	Speaker 1:		MISC
	Speaker 1: Major N:		MISC TSU
1504		Bansaw Kilo.	TSU COA
1504 1505	Major N:	Bansaw Kilo.  The locations gonna be 701. Huntress.  Yes, we just had a McGuire – a General come from McGuire and team 21. they want him to pass all his fuel to either other aircrafts and come back to McGuire and	TSU COA
1504 1505 1506	Major N: Speaker:	Bansaw Kilo.  The locations gonna be 701. Huntress.  Yes, we just had a McGuire – a General come from McGuire and team 21. they want him to pass all his fuel to either other aircrafts and come back to McGuire and land and refuel and come back up.	TSU COA
1504 1505 1506 1507	Major N: Speaker: Sergeant B:	Bansaw Kilo.  The locations gonna be 701. Huntress.  Yes, we just had a McGuire – a General come from McGuire and team 21. they want him to pass all his fuel to either other aircrafts and come back to McGuire and land and refuel and come back up.  Okay. Hold on a second.	TSU COA MISC
1504 1505 1506 1507 1508	Major N: Speaker: Sergeant B: Speaker:	Bansaw Kilo.  The locations gonna be 701. Huntress.  Yes, we just had a McGuire – a General come from McGuire and team 21. they want him to pass all his fuel to either other aircrafts and come back to McGuire and land and refuel and come back up.  Okay. Hold on a second.  All right.	TSU COA MISC MISC
1504 1505 1506 1507 1508 1509	Major N: Speaker: Sergeant B: Speaker: Sergeant B:	Bansaw Kilo.  The locations gonna be 701. Huntress.  Yes, we just had a McGuire – a General come from McGuire and team 21. they want him to pass all his fuel to either other aircrafts and come back to McGuire and land and refuel and come back up.  Okay. Hold on a second.  All right.  Give me –	TSU COA MISC MISC NC
1504 1505 1506 1507 1508 1509 1510	Major N: Speaker: Sergeant B: Speaker: Sergeant B: Major N:	Bansaw Kilo.  The locations gonna be 701. Huntress.  Yes, we just had a McGuire – a General come from McGuire and team 21. they want him to pass all his fuel to either other aircrafts and come back to McGuire and land and refuel and come back up.  Okay. Hold on a second.  All right.  Give me –  ID real world com 3.	TSU COA  MISC MISC NC RTA NC TSU
1504 1505 1506 1507 1508 1509 1510	Major N: Speaker: Sergeant B: Speaker: Sergeant B: Major N: Sergeant B:	Bansaw Kilo.  The locations gonna be 701. Huntress.  Yes, we just had a McGuire – a General come from McGuire and team 21. they want him to pass all his fuel to either other aircrafts and come back to McGuire and land and refuel and come back up.  Okay. Hold on a second.  All right.  Give me –  ID real world com 3.  Team 21 –  They want team 21 to get rid of all the fuel he needs to get rid of to go homeland. They want him to refuel when he gets there, and	TSU COA  MISC MISC NC RTA NC TSU
1504 1505 1506 1507 1508 1509 1510 1511 1512	Major N: Speaker: Sergeant B: Speaker: Sergeant B: Major N: Sergeant B: Speaker:	Bansaw Kilo.  The locations gonna be 701. Huntress.  Yes, we just had a McGuire – a General come from McGuire and team 21. they want him to pass all his fuel to either other aircrafts and come back to McGuire and land and refuel and come back up.  Okay. Hold on a second.  All right.  Give me –  ID real world com 3.  Team 21 –  They want team 21 to get rid of all the fuel he needs to get rid of to go homeland. They want him to refuel when he gets there, and come back out.  All right. So they want to get rid of the fuel he currently has, refuel at McGuire, and	TSU COA  MISC MISC NC RTA NC TSU

1515	Major N:	Conar –	NC
1516	Sergeant B:	Fucking sheet?	NC
1517	Major N:	I got it. Conar.	NC
1518	Sergeant B:	I was just talking 21. You guys talking to 21?	ITK2
1519	Major N:	From American Airlines, okay? I think we need updates when you can for the Conar commander. Jamie? I need to get some information from you. How much time do I have with the guys over New York City. We need updates on New York City. I got updates on poppa Alpha – 46.	
1520	Sergeant B:	Got it. We're up. Got it. Got it. Yes. I also got it on that too. Okay. Bye.	TSU
1521	Major N:	You can tell my wife don't bother going through – what do you call it. I don't know when I'm gonna be home.	
1522	Sergeant B:	12.1 and they got a tanker in the area.	KT
1523	Major N:	Did you copy real world deaf com 3? Yeah. Okay.	ITK2
1524	Sergeant B:	Copy that.	MISC
1525	Sergeant B:	12.1 and they got a tanker in the area.	TSU
1526	Major N:	Okay. Great. Yeah. Okay. I got the guys over New York City 12.1 with a tanker, so I got lots of gas. Yeah. Pantha 4546. Okay. Got it? Bye.	
1527	Speaker 1:	Washington Center just called saying Langley refuses to launch any jets.	SUK
1528	Major N:	The Mains that just launched were designated to refuel – Washington.	SUK
1529	Speaker 1:	They said if you –	MISC
1530	Speaker:	McGuire.	ITK2
1531	Speaker 1:	available that I could use the Mains somewhere else. If they do I've got 100, 000	
1532	Speaker 1:	I'm gonna use the Mains to start refueling the F16s that have been mentioned out of	SOG
1533	Major N:	Okay. Who owns the teams?	ITK2
1534	Speaker 13:	You want me to get weapons and find out who's airborne, how many?	ITK2
1535	Major N:	Right. And give me some fuel stats.	ITK2
1536	Sergeant B:	huntress Whiskey 107.	MISC
1537	Speaker 16:	Go ahead.	MISC

1538	Sergeant B:	Somebody called me about team 21.	MISC
1539	Speaker 16:	Yeah, I just wanted to know was he on the block?	ITK2
1540	Sergeant B:	Well, listen – well this is about McGuire called, and they wanted him to dump fuel and then land McGuire refuel and come back.	
1541	Speaker 16:	Uh-huh.	MISC
1542	Sergeant B:	All right. Listen, do you guys have qualms over going to McGuire?	ITK2
1543	Speaker 16:	No, we don't have qualms with McGuire.	ITK2
1544	Sergeant B:	All right. Well, here's the deal with the McGuire birds.	MISC
1545	Sergeant B:	Team 21 is gonna get refueled by Main 92 at Whiskey 107 right now; right?	KT
1546	Speaker 16:	Uh-huh. Yeah.	MISC
1547	Sergeant B:	So I'm gonna call McGuire and let them know that cause obviously they're not getting some information.	
1548	Speaker 16:	Okay. You want me to take Main 92 and 107and don't take them to 105?	FI
1549	Sergeant B:	No, no, no, leave it as it is. Main 92 is going to 107 to refuel team 21?	FI
1550	Speaker 16:	Okay. Okay.	MISC
1551	Sergeant B:	Got that?	MISC
1552	Speaker 16:	Someone called earlier and wanted Main 92 to go to 105.	TSU
1553	Sergeant B:	Okay. I don't know what's going on with that. I'm just so.	TSU
1554	Speaker 16:	Okay.	MISC
1555	Sergeant B:	Okay. Run your battle.	MISC
1556	Speaker 16:	Bye.	MISC
1557	Sergeant B:	Who's team –	ITK2
1558	Major N:	They got it. Call them and ask them.	ITK2
1559	Sergeant B:	Yeah, this is huntress calling.	MISC
1560	Speaker:	Yeah.	MISC
1561	Sergeant B:	Listen, somebody called Giant Killer saying they wanted us to pack to us that team 21 to dump it's fuel and get to McGuire refuel and come back out.	
1562	Speaker:	Hold on. Just a second.	MISC
1563	Sergeant B:	All right.	MISC

	•		
1564	Speaker:	Okay. Say again please? We got a bunch stuff going on.	MISC
1565	Sergeant B:	Yeah, I know me too. Team 21.	FI
1566	Speaker:	Okay.	MISC
1567	Sergeant B:	Is currently in Whiskey 107.	FI
1568	Speaker:	Okay.	MISC
1569	Sergeant B:	All right. I got a call from Giant Killer saying that somebody from McGuire called and said they wanted tame 21 to dump the rest of the fuel he has, come down to McGuire, refuel, and come back for further refuels, refuels missions. Okay.	
1570	Sergeant B:	All right. Listen, team 21 is currently gonna be getting refueled by a main 92 in the Whiskey 107 area.	
1571	Speaker:	Main 92?	FI
1572	Sergeant B:	Yep, Main 92 is – he should be with him right now. He is to his west 24 miles.	FI
1573	Sergeant B:	So they're gonna hook up and refuel team 21 cause he's pretty low.	FI
1574	Sergeant B:	All right.	MISC
1575	Sergeant B:	Thanks.	MISC
1576	Speaker:	All right. Thanks.	MISC
1577	Sergeant B:	Okay. I got to pee.	MISC
1578	<i>Foxxy:</i>	Cap 2 is –	TSU
1579	Sergeant B:	This must be Caps 1.Huntress.	VRM, TSU
	Female Speakers3:	Is there?	NC
1581	Sergeant B:	Yeah, he's a little busy. Can I take a message?	MISC
1582	Female Speakers3:	Would you tell him that his wife it at home. He doesn't have to worry.	MISC
1583	Sergeant B:	Okay. Great. Thanks.	MISC
1584	Female Speakers3:	Bye.	MISC
1585	Speaker 1:	He's squawking the same mode 3. I'd like Caps 2 to squawk.	TSU, RTA
1586	Tim:	of Air Force 1.	ITK2
1587	Major N:	Don't know yet. Hasn't had any word on chat. They can contact them up there.	ITK2
1588	Sergeant B:	What happened to the tanks now? I needed	ITK2
		that.	

1590	Major N:	Chick will be team 21.	ITK2
	Speaker:	Roger that. You talking about the 22 I just	
1331	ореакет.	got.	IIIVZ
1592	Major N:	Moving 22's not my freq. Thank you very	
		much. If you got to pee, go pee. Make sure	
	_	that FAA coordinates with huntress control.	
	Speaker 1:	7	MISC
1594	Major N:	God damn it. Good job, buddy, you're keeping get grip on it.	MISC
1595	Speaker 1:	We got everybody out here, FB and wants a break.	MISC
1596	Major N:	Help out with the — I want you and Phil working like the links chicks clip and with E3 placement stuff like that cause certainly — I want you guys working with that. And if need be — your still weapons; right? Plus you guys can swing. Yeah. Great. Where? Still the tanker. Okay. Okay. E3s. Yeah.	SOG
1597	Speaker 9:	This is Flight A10, we're going home to Westover. We grabbed the tanker. He's got about 20, 000 available and we're gonna park him –	
1598	Major N:	Great. Might be a good point to tell them to isolate the tankers again? Got 19 of them.	R, SUK
1599	Sergeant B:	Okay. Never mind he don't need to know that.	MISC
1600	Major N:	Yes. Okay.	MISC
1601	Sergeant B:	We can divert him.	R
1602	Major N:	or they have to chat? No. They got the FO over there. Okay. Fine. Christ. Okay. Get rid of those.	MISC
1603	Sergeant B:	Not the whole thing coming out of East Pike.	RTA
1604	Major N:	Okay. Where's Air Force 1.	ITK2
1605	Speaker:	you ass. You made me loose my tracks	VRM
1606	Female Speakers:	Are you talking to 92?	ITK2
1607	Major N:	Grover, can you get somebody to handle that one?	RTA
1608	Speaker 1:	What?	MISC
1609	Speaker 1:	Yep.	MISC

1610	Major N:	Tell them to standby at first. Find out who they're supposed to go to and tell the controller to get a frequency. We might have a – we got to find out where Air Force 1 is right now I'm looking for him.	TMM2
1611	Speaker:	Is Bret Garner in?	MISC
1612	Sergeant B:	Yes, he is.	MISC
1613	Speaker:	What number got him on – we got somebody's who trying to get a hold of him?	MISC
1614	Sergeant B:	What's your extension over here Bret? 6336.	MISC
1615	Speaker:	Okay. I'm transferring.	MISC
1616	Sergeant B:	Bye. Phone call for you coming Bret.	MISC
1617	Major N:	MDT the tanker? Middletown. Right there.	IKT2, VRM
1618	Speaker 1:	How many two?	ITK2
1619	Major N:	You might utilize those guys for the armed escort. Find out who they are first.	SOG
1620	Major N:	Find out who has them.	RTA
1621	Major N:	Find out what says – two coming out of Langley probably four to follow. They re gonna go up around Middleton to protect.	
1622	Sergeant P:	Huntress Sergeant P on the line. How can I help you?	MISC
1623	Sergeant H:	Sergeant H from Saber guards.	MISC
1624	Sergeant P:	Yes, sir.	MISC
1625	Sergeant H:	Saber, can hear you guys broadcasting.	TSU
1626	Sergeant B:	Sergeant B.	MISC
1627	Speaker:	The state of the MWD today?  FD?	ITK2
1628	Sergeant B:	Not in the FD techs.	ITK2
1629	Major N:	You need to tell me what the fucking plan is up here. I'm not bitching at you, but –	RTA
1630	Speaker:	Is there any support from Duluth at this point in time.	ITK2
1631	Sergeant B:	Yeah, probably. Hold on. Let me double check. I got Duluth on the phone. They want to know if you need any support.	
1632	Major N:	Duluth. Here's something you might think about. If we want to use F15s to escort the commander chief.	
1633	Major N:	No, suppose he's coming up north now. Well, let's just do that. Do that – okay. Tell them before they start asking questions.	

1634	Speaker:	calling the units directly.	MISC
1635	Major N:	You know what tell them to push it through the command post through the higher headquarters.	
1636	Sergeant B:	I got Duluth on the phone.	MISC
1637	Major N:	They need to call the battle station informed and speak to Conar like that. Be nice to them though. You gonna recap.	
1638	Speaker 13:	Okay. We got everybody that we got airborne right now and where they're at.	TSU
1639	Major N:	Okay. So what do you want me to do with this?	ITK2
1640	Speaker 13:	l was gonna stat down Conar.	ITK2
1641	Major N:	l got Saber 11 and 12 in Grand Rapids. Thing 1 and Thing 2 are basically come form Toledo. 071	
1642	Sergeant B:	Sorry about this. We've got a lot of stuff going on, so I'm waiting for the guy you need to talk to.	
1643	Speaker:	Okay. That's fine. I'm not leaving.	MISC
1644	Speaker 1:	Langley are holding over Boston and three and four are intercepting that tank encounter over the ocean. We got mover 22 AC10 in Whiskey 105. Main 92 and team 21 in location 10 louver at 135.	
1645	Sergeant B:	We've got Duluth on the line, and they want to know what we need. Who can I send them too.	
1646	Speaker 1:	And that's in 108.	NC
1647	Major N:	Give me a phone number. Okay. Well, we're not calling tankers because everybody else I calling tankers.	
1648	Speaker 1:	The force 11 through 14 that I don't believe you have taken off yet.	ITK2
1649	Sergeant B:	Duluth put them on standby	COA
1650	Major N:	Coming down the – that's right. Put them on standby. 11 and 12 is put them in standby and put them in suit up and at least two For who? Yeah, two ships on Duluth. Suit up.	
1651	Speaker 1:	You had a couple in Syracuse somewhere didn't you?	ITK2

1652	Major N:	Okay. I'm putting two more – also I got two F15s. Another two coming from Duluth and in suit up.	
1653	Speaker 1:	Atlantic City fighters, where they going?	ITK2
1654	Major N:	They're going to PAX.	ITK2
1655	Speaker 1:	They're going to PAX.	ITK2
1656	Major N:	PAX river. Okay.	ITK2
1657	Speaker:	Check list complete for assailants for surveillance on slide 1. Okay do the fucking Cap management, man. Do schoolhouse shit?	
1658	Speaker 13:	No, we're not showing anything right now. No.	VRM
1659	Sergeant B:	Steve, you got – I got to some –	MISC
1660	Major N:	We need to know once we're contained. Surveillance check list complete. Okay. N's got four ships out of Syracuse Cobra 1 and 2, Apex 1 and 2. We've got a tanker 135 fuel 72. They're just east of Buffalo right now. They're rejoining to refuel and then heading to Pittsburgh.	·
1661	Sergeant B:	Okay. Got it.	MISC
1662	Major N:	Thanks, Jamie. Jamie, have you got a minute.	MISC
1663	Major N:	Why don't you just read this to me, and I'll type it. This is for Conar a recap, okay? I started in the west. I got two F16s Grand Rapids.	
1664	Speaker 1:	Okay. That's Saber 11 and 12.	TSU
1665	Major N:	Got it. Next.	MISC
1666	Speaker 1:	Cobra 1 and 2 –	TSU
1667	Speaker:	BC1 being secure the line has been used. I'm trying to get dial them back.	MISC
1668	Speaker:	If I get them, I get a hold of you.	MISC
1669	Major N:	Those are Toledo; right? Who are they joining?	ITK2
1670	Speaker 1:	Joining 135.	ITK2
1671	Major N:	Washington Center? Okay.	TSU
1672	Speaker 1:	We have team 11 and 12 –	TSU
1673	Major N:	l'm gonna – man.	MISC
1674	Speaker 13:	You heard the thing about there was an aircraft circling Cleveland Center?	ITK2
1675	Major N:	I heard we –	NC

1676	Speaker 13:	We've vectored him around Cleveland	SUK
4077	A 4 = 1 = 1 = A 1	twice, and he hasn't said anything.	TNANAC
	Major N:	Nothing. Okay. Nothing in Cleveland.	TMM2
	<i>Foxxy:</i>	Nope.	TMM2
1679	Major N:	That's from our fighters. Okay. Next. Just a little bit. Keep them around the Detroit area.	
1680	Speaker 1:	Main 85 over New York.	SUK
1681	Major N:	Over New York City? Okay.	IMM
	Major N:	Okay. Over in the Cleveland area we had the report of the aircraft circling Cleveland area. The fighters have investigated the area, done a sweep. Nothing. So we're gonna pass that along. We got somebody from Washington Center asking – somebody gonna ask to request the – to get a fighter escort for the Attorney General. Yeah. That's – yeah, we're running out of tankers, man. Okay. Good. Yeah. Yeah. He's waiting. Main 85 87. Okay. Good. 8687, right. Got it. Main 92? Go this is MCC Major N.	
1683	Major B:	Hi, this is Major B at the Air Traffic Services  FA facility here in Virginia. The Attorney General is in November 4 about 40 minutes out of Washington, and he's requesting military escort into Washington National Airport. I s there anyway we can get a scramble going?	
1684	Major N:	I got aircraft in the area already. What's his code?	ITK2
1685	Major B:	Standby. Let me find out.	MISC
1686	Major N:	Are you listening up, Mike. You got it. Is that him? Are you still there? Hello. No, right now we've got the Attorney General, and he's requesting our men escort him in. You still there? Hello.	
1687	Major B:	You still there?	MISC
1688	Major N:	Yeah, I'm still here.	MISC
1689	Major B:	Okay. The code is 6527 and Victor frequency is 13365.	TSU
1690	Major N:	13365	MISC
1691	Major B:	That's right.	MISC
1692	Major N:	Okay. We don't have any Victor capability. Is it possible to get a Uniform for us?	SUK, ITK2

	T		
1693	Major B:	Okay. Let me find out. If you hang on for just a minute, I'll get a uniform.	MISC
1694	Major N:	Like 11.	MISC
1695	Major B:	Hang on.	MISC
1696	Major N:	Okay. Also we should –	MISC
1697	Speaker:	For the same facility, the centers did you get a chance when you can look over your space and see if you have any primary.	
1698	Major N:	Okay. Are you still there? Are you still there? Hello. Exactly.	MISC
1699	Major B:	Okay. Washington checked in they'll be back shortly with a uniform frequency just stay on the line.	
1700	Major N:	Okay. Hey, is that – could it be squawking 4,000.	ITK2, VRM
1701	Major B:	No, 6527 is the squawk.	ITK2
1702	Major N:	6527 and you got a point of where he's at?	ITK2
1703	Major B:	Okay. I'll get that also	MISC
1704	Major N:	Okay. Just standby.	MISC
1705	Major B:	Okay. He's squawking 6522 not 27. 6522.	SUK
1706	Major N:	Okay. We're looking for him. Also sir do you have a lat./long. possible or give me a point out — we found him. I got him. We have him on our radar screen now, sir.	
1707	Major B:	You got him. Okay. Good.	ITK2
1708	Major N:	That's him right there Bravo 545.	SUK, VRM
1709	Major B:	Do you have happen to have –	ITK2
1710	Major N:	We're working it right now. We've got fighters in the area.	ITK2, TSU
1711	Major B:	Okay.	MISC
1712	Major N:	And we're gonna see if we can get to them on third escorting.	KT
1713	Major B:	Okay. So you're gonna call it 72553330.	MISC
1714	Major N:	Standby. Give me the number again.	MISC
1715	Major B:	725	MISC
1716	Major N:	725	MISC
1717	Major B:	3330	MISC
1718	Major N:	3330	MISC
1719	Major B:	Commercial is 703-904-4436.	MISC
1720	Sergeant B:	You got people on the boat.	ITK2
1721	Major N:	4436 and who am I speaking to.	MISC
1722	Major B:	Major B.	MISC
	•	•	

1723	Major N:	Major B. Okay. We'll try to get back to you if we can. Understand we're really hectic here and I'm sure you guys are too.	
1724	Major B:	Understand.	MISC
1725	Major N:	We'll try to get back to you.	MISC
1726	Major B:	Thank you.	MISC
1727	Major N:	Uh-huh. I need escorted into Washington National. Bravo 545.	COA
1728	Speaker 1:	Do we know where he is now?	ITK2
1729	Major N:	He's just – he's out here. I think he's on a special track right out here.	VRM, TMM2
1730	Sergeant B:	Do you got lat./long.?	ITK2
1731	Major N:	No, I don't know. Get it from – okay. On this track make it a specialty.	ITK2, VRM, VRM
1732	Female Speakers:	Do you need a break?	MISC
1733	Major N:	Not yet.	MISC
1734	Female Speakers:	Are you sure?	MISC
1735	Major N:	I'm positive.	MISC
1736	Female Speakers:	·	NC
1737	Major N:	I'm in a zone baby. Sorry, I can't say that. You're my boss. Checklist is complete for surveillance is in right now. What do we got?	
1738	Speaker 1:	Bravo 545 that's the Attorney General.	KT
1739	Sergeant B:	Airborne?	ITK2
1740	Speaker 1:	That's a special. We haven't got a –	ITK2
1741	Speaker:	I want to get all these –	VRM
1742	Major N:	Foxxy?	MISC
1743	Sergeant B:	Just give me that info.	RTA
1744	Major N:	There's a helicopter out there as well. Someone might want to copy that. Okay. It's still Bravo 545. It's just on – it's a special. Okay. Please escort.	
1745	Speaker 1:	Do we know what type of aircraft by any chance?	ITK2
1746	Major N:	I can get that. Can you scoot.	MISC
1747	Sergeant MK:	Northeast Sergeant MK, may I help you?	MISC

commanding control. We're just waiting for ITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going down?  1763 Major N:  I got controllers all over up and down the ITK2 east coast right now. You can contact us if need be on AICC anyone of those sites.  1764 Captain S. S. AICC?  ITK2  1765 Major N:  We should be listening up on that.  RTA  1766 Captain S. S. What frequency's that/  :  1767 Major N:  364.2.  ITK2  1768 Captain S. S. 364.2?  ITK2  1769 Major N:  Yep or do you got the call 6313?  ITK2  1770 Captain S. S. 6 – what's the HF?				
1750 Lt. Colonel Yes. MISC  MS: 1751 Sergeant MK: Standby I'll work it for you. 1752 Lt. Colonel Thanks. Thanks. MISC 1753 Major N: Go press. Push them out there and load COA them up. 1754 Sergeant MK: - anyone of those three. 1755 Major N: Okay. What does he want now? Do we ITK2, VRN know what kind of aircraft this is. 1756 Speaker 1: No, we do not. 1757 Major N: Can we get that. MCC, Major N ITK2 1758 Captain S. S. Yeah, hi. This is Captain S. S. from the MISC 106 rescue wing down in Long Island. 1759 Major N: Scott, how you doing? How can I help you, MISC man? 1760 Captain S. S. Oh, excellent. I guess we could all be MISC better, huh? 1761 Major N: No shit. MISC 1762 Captain S. S. Hey, we've passed to do some airborne KT, commanding control. We're just waiting forITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure — what's going down? 1763 Major N: I got controllers all over up and down the ITK2 east coast right now. You can contact us if need be on AICC anyone of those sites. 1764 Captain S. S. AICC? 1765 Major N: We should be listening up on that. RTA 1766 Captain S. S. What frequency's that/ 1767 Major N: 364.2? 1768 Major N: Yep or do you got the call 6313? ITK2 1769 Major N: Yep or do you got the call 6313? ITK2 1770 Captain S. S. 6 — what's the HF?		Ms:	you give me the number of your – of a sku	
Ms: 1751 Sergeant MK: Standby I'll work it for you. MISC 1752 Lt. Colonel Thanks. Thanks. Ms: 1753 Major N: Go press. Push them out there and load COA them up. 1754 Sergeant MK: anyone of those three. VRM 1755 Major N: Okay. What does he want now? Do we ITK2, VRN know what kind of aircraft this is. 1756 Speaker 1: No, we do not. 1757 Major N: Can we get that MCC, Major N ITK2 1758 Captain S. S. Yeah, hi. This is Captain S. S. from the MISC 106 rescue wing down in Long Island. 1759 Major N: Scott, how you doing? How can I help you, MISC man? 1760 Captain S. S. Oh, excellent. I guess we could all be MISC better, huh? No shit. 1762 Captain S. S. Hey, we've passed to do some airborne KT, MS commanding control. We're just waiting for ITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure — what's going down? 1763 Major N: I got controllers all over up and down the ITK2 east coast right now. You can contact us if need be on AICC anyone of those sites. 1764 Captain S. S. AICC? ITK2 1765 Major N: We should be listening up on that. 1766 Captain S. S. What frequency's that/ 1767 Major N: 364.2. 1768 Captain S. S. 364.2? ITK2 1769 Major N: Yep or do you got the call 6313? ITK2 1770 Captain S. S. 6 — what's the HF?	1749	Sergeant MK:	The fighter officer sku number?	MISC
1752 Lt. Colonel Thanks. Thanks.  MS:  1753 Major N:  Go press. Push them out there and load COA them up.  1754 Sergeant MK:			Yes.	MISC
Ms:   Go press. Push them out there and load COA them up.	1751	Sergeant MK:	Standby I'll work it for you.	MISC
them up.  1754 Sergeant MK: anyone of those three. VRM  1755 Major N: Okay. What does he want now? Do we ITK2, VRN know what kind of aircraft this is.  1756 Speaker 1: No, we do not. ITK2  1757 Major N: Can we get that MCC, Major N ITK2  1758 Captain S. S. Yeah, hi. This is Captain S. S. from the MISC 106 rescue wing down in Long Island.  1759 Major N: Scott, how you doing? How can I help you, MISC man?  1760 Captain S. S. Oh, excellent. I guess we could all be MISC 1761 Major N: No shit. MISC  1762 Captain S. S. Hey, we've passed to do some airborne KT, MS 1762 Captain S. S. Hey, we've passed to do some airborne KT, MS 1763 Major N: I got controll. We're just waiting for ITK2 18 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going down?  1763 Major N: I got controllers all over up and down the ITK2 1764 Captain S. S. AICC? 1765 Major N: We should be listening up on that. RTA 1766 Captain S. S. What frequency's that/ 1767 Major N: We should be listening up on that. RTA 1768 Captain S. S. 364.2? 1769 Major N: Yep or do you got the call 6313? ITK2 1770 Captain S. S. 6 – what's the HF? ITK2			Thanks. Thanks.	MISC
1755   Major N:   Okay. What does he want now? Do we ITK2, VRN know what kind of aircraft this is.   1756   Speaker 1: No, we do not.   ITK2   1757   Major N:   Can we get that MCC, Major N   ITK2   1758   Captain S. S. Yeah, hi. This is Captain S. S. from the MISC   106 rescue wing down in Long Island.   1759   Major N:   Scott, how you doing? How can I help you, MISC man?   1760   Captain S. S. Oh, excellent.   I guess we could all be MISC   better, huh?   1761   Major N:   No shit.   MISC   1762   Captain S. S. Hey, we've passed to do some airborne KT, MS   Commanding control. We're just waiting for ITK2   launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going down?   1763   Major N:   I got controllers all over up and down the ITK2   east coast right now. You can contact us if need be on AICC anyone of those sites.   1764   Captain S. S. AICC?   ITK2   1765   Major N:   We should be listening up on that.   RTA   1766   Captain S. S. What frequency's that/   ITK2   1767   Major N:   364.2.   ITK2   1769   Major N:   Yep or do you got the call 6313?   ITK2   1770   Captain S. S. 6 - what's the HF?   ITK2   1770   Captain S. S. 6 - what's the HF?   ITK2   1770   ITK2   1770   ITK2   ITK2   ITK2   1770   ITK2   ITK2   ITK2   1770   ITK2   IT	1753	Major N:	•	COA
know what kind of aircraft this is.  1756 Speaker 1: No, we do not.  1757 Major N: Can we get thatMCC, Major N	1754	Sergeant MK:	anyone of those three.	VRM
1757 Major N: Can we get thatMCC, Major N   ITK2   1758 Captain S. S. Yeah, hi. This is Captain S. S. from the MISC   106 rescue wing down in Long Island.   1759 Major N: Scott, how you doing? How can I help you, MISC man?   1760 Captain S. S. Oh, excellent. I guess we could all be MISC better, huh?   1761 Major N: No shit.   MISC   1762 Captain S. S. Hey, we've passed to do some airborne KT, commanding control. We're just waiting for ITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going down?   1763 Major N: I got controllers all over up and down the ITK2 east coast right now. You can contact us if need be on AICC anyone of those sites.   1764 Captain S. S. AICC?   ITK2   1765 Major N: We should be listening up on that. RTA   1766 Captain S. S. What frequency's that/   ITK2   1767 Major N: 364.2.   ITK2   1769 Major N: Yep or do you got the call 6313?   ITK2   1769 Major N: Yep or do you got the call 6313?   ITK2   1770 Captain S. S. 6 – what's the HF?   ITK2	1755	Major N:		ITK2, VRM
1758 Captain S. S. Yeah, hi. This is Captain S. S. from the MISC 106 rescue wing down in Long Island.  1759 Major N: Scott, how you doing? How can I help you, MISC man?  1760 Captain S. S. Oh, excellent. I guess we could all be MISC better, huh?  1761 Major N: No shit. MISC  1762 Captain S. S. Hey, we've passed to do some airborne KT, commanding control. We're just waiting for ITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going down?  1763 Major N: I got controllers all over up and down the ITK2 east coast right now. You can contact us if need be on AICC anyone of those sites.  1764 Captain S. S. AICC? ITK2  1765 Major N: We should be listening up on that. RTA  1766 Captain S. S. What frequency's that/ ITK2  1767 Major N: 364.2. ITK2  1769 Major N: Yep or do you got the call 6313? ITK2  1769 Major N: Yep or do you got the call 6313? ITK2	1756	Speaker 1:	No, we do not.	ITK2
106 rescue wing down in Long Island.	1757	Major N:	Can we get that MCC, Major N	ITK2
man?  1760 Captain S. S. Oh, excellent. I guess we could all be MISC better, huh?  1761 Major N: No shit.  1762 Captain S. S. Hey, we've passed to do some airborne KT, commanding control. We're just waiting for ITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure — what's going down?  1763 Major N: I got controllers all over up and down the ITK2 east coast right now. You can contact us if need be on AICC anyone of those sites.  1764 Captain S. S. AICC? ITK2  1765 Major N: We should be listening up on that. RTA  1766 Captain S. S. What frequency's that/  1767 Major N: 364.2. ITK2  1769 Major N: Yep or do you got the call 6313? ITK2  1769 Major N: Yep or do you got the call 6313? ITK2	1758	Captain S. S. :	•	MISC
i. better, huh?  1761 Major N: No shit.  1762 Captain S. S. Hey, we've passed to do some airborne KT, ocommanding control. We're just waiting for ITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going down?  1763 Major N: I got controllers all over up and down the ITK2 east coast right now. You can contact us if need be on AICC anyone of those sites.  1764 Captain S. S. AICC?  1765 Major N: We should be listening up on that.  1766 Captain S. S. What frequency's that/  1767 Major N: 364.2. ITK2  1768 Captain S. S. 364.2?  1769 Major N: Yep or do you got the call 6313? ITK2  1770 Captain S. S. 6 – what's the HF?	1759	Major N:		MISC
1762 Captain S. S. Hey, we've passed to do some airborne KT, commanding control. We're just waiting for ITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going down?  1763 Major N:  I got controllers all over up and down the lTK2 east coast right now. You can contact us if need be on AICC anyone of those sites.  1764 Captain S. S. AICC?  1765 Major N:  We should be listening up on that.  RTA  1766 Captain S. S. What frequency's that/  1767 Major N:  364.2.  1768 Captain S. S. 364.2?  1769 Major N:  Yep or do you got the call 6313?  ITK2  1770 Captain S. S. 6 – what's the HF?	1760	Captain S. S.		MISC
commanding control. We're just waiting for ITK2 launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going down?  1763 Major N:  I got controllers all over up and down the ITK2 east coast right now. You can contact us if need be on AICC anyone of those sites.  1764 Captain S. S. AICC?  ITK2  1765 Major N:  We should be listening up on that.  RTA  1766 Captain S. S. What frequency's that/  ITK2  1767 Major N:  364.2.  ITK2  1769 Major N:  Yep or do you got the call 6313?  ITK2  1770 Captain S. S. 6 – what's the HF?	1761	Major N:	No shit.	MISC
east coast right now. You can contact us if need be on AICC anyone of those sites.  1764 Captain S. S. AICC?  1765 Major N: We should be listening up on that. RTA  1766 Captain S. S. What frequency's that/  1767 Major N: 364.2. ITK2  1768 Captain S. S. 364.2?  1769 Major N: Yep or do you got the call 6313? ITK2  1770 Captain S. S. 6 – what's the HF?	1762	Captain S. S. :	commanding control. We're just waiting for launch authority with one of our 130s. We ere wondering what's the TOM plan, the frequencies are they secure – what's going	ITK2
: 1765 <i>Major N:</i> We should be listening up on that. RTA 1766 Captain S. S. What frequency's that/ : 1767 <i>Major N:</i> 364.2. ITK2 1768 Captain S. S. 364.2? ITK2 1769 <i>Major N:</i> Yep or do you got the call 6313? ITK2 1770 Captain S. S. 6 – what's the HF?	1763		east coast right now. You can contact us if	
1766 Captain S. S. What frequency's that/       ITK2         1767 Major N:       364.2.       ITK2         1768 Captain S. S. 364.2?       ITK2         1769 Major N:       Yep or do you got the call 6313?       ITK2         1770 Captain S. S. 6 – what's the HF?       ITK2	1764	Captain S. S.	AICC?	ITK2
: 1767 <i>Major N:</i> 364.2. ITK2 1768 Captain S. S. 364.2? ITK2 1769 <i>Major N:</i> Yep or do you got the call 6313? ITK2 1770 Captain S. S. 6 – what's the HF? ITK2	1765	Major N:	We should be listening up on that.	RTA
1768 Captain S. S. 364.2?       ITK2         1769 Major N:       Yep or do you got the call 6313?       ITK2         1770 Captain S. S. 6 – what's the HF?       ITK2	1766	Captain S. S. :	What frequency's that/	ITK2
: 1769 Major N: Yep or do you got the call 6313? ITK2 1770 Captain S. S. 6 – what's the HF? ITK2	1767	Major N:	364.2.	ITK2
1770 Captain S. S. 6 – what's the HF?	1768	Captain S. S. :	364.2?	ITK2
·	1769	Major N:	Yep or do you got the call 6313?	ITK2
	1770	Captain S. S.	6 – what's the HF?	ITK2
1771 Major N: No, 6313 the extension here.	1771	Major N:	No, 6313 the extension here.	ITK2

1772	Captain S. S.	Okay. They put me through to you though.	MISC
1773	Major N:	Okay. And tell them that you need a frequency and I said okay. It's cool because we need command control out there as well.	SOG
1774	Captain S. S.	Okay.	MISC
1775	Major N:	So you're sending up King?	ITK2
1776	Captain S. S.	Yeah, it's gonna be King – I'm not sure of the call sign.	ITK2
1777	Major N:	All I got to know is King, and I'll know who you guys are.	ITK2
1778	Captain S. S.	Okay. So they general frequency to get in touch with you guys is 364.2.	UR
1779	Major N:	Yeah, right now. Yeah.	ITK2
1780	Captain S. S.	And will the fighters be on that as well? That's a big concern. They don't want get –	ITK2
1781	Major N:	No, then we'll push you over to a different frequency. We'll use you for – utilize you for a command control.	ITKW, KT
1782	Captain S. S.	Okay. So you'll be talking to the fighters if they intercept us?	ITK2
1783	Major N:	Okay. If you could just give them a yell on that extension number too.	ITK2
1784	Captain S. S.	That's 6313?	ITK2
1785	Major N:	6313. I'll tell them about it.	ITK2
1786	Major N:	Tell them to talk to you direct.	RTA
1787	Captain S. S.	Okay. Thanks.	MISC
1788	Major N:	Okay. Then we can get comp plan going with your guys.	TSU
1789	Major N:	Okay. Cool.	MISC
1790	Captain S. S.	Bye.	MISC
1791	Major N:	Yep, Mayan Mikes. Okay.	MISC
1792	Speaker 1:		NC
	Major N:	See if they can push them. See if they can push it. Is it a helicopter? Is it a helicopter over there?	
1794	Speaker 1:	The helicopter they don't get any kind of –	NC
1795	Sergeant B:	I got a big problem never called back. As of right now	NC
1796	Female Speakers:	This is for Air Force 1? Wait. No.	VRM, TMM2
1797	Speaker 1:	Air Force 1 turned west.	VRM, TMM2

1798	Female Speakers:	They turned –	VRM, TMM2
1799	Major N:	That's 6 – here I got it on here.	VRM
1800	Speaker 1:	545, N.	MISC
1801	Major N:	545. Go ahead, sir. This is Major Nasipany MCC. Go.	MISC
1802	Speaker:	This Guy 4 in Washington Center sector. We're working November 4 inbound to national Airport. You were supposed to have an escort coming up scrambled up from Richmond. They have not shown up. I don't even show them in the air.	
1803	Major N:	Okay I got other aircraft coming over to them right now.	R
1804	Speaker:	The other aircraft – can I get a call sign?	ITK2
1805	Major N:	Standby.	MISC
1806	Speaker:	Give me a code too?	ITK2
1807	Major N:	Can you get the code? Yeah, we never got the word that they were coming up from Richmond for escort, so we have an enough assets in the air that we can do this.	
1808	Speaker:	Okay. That's good.	MISC
1809	Major N:	Sir, do you got him turned backwards.	ITK2
1810	Speaker:	We got him turned Westbound until we get an escort over there. Call sign is November 4. He's right now over Kessle code 6522.	
	Speaker:  Major N:	an escort over there. Call sign is November	
1811	·	an escort over there. Call sign is November 4. He's right now over Kessle code 6522.	TSU
1811 1812	Major N:	an escort over there. Call sign is November 4. He's right now over Kessle code 6522.  I don't know what they've done with them.  Leaving 239 and be sending them to 19. Do	TSU TSU, VRM RTA, TSU, COA, VRM
1811 1812 1813	Major N: Speaker:	an escort over there. Call sign is November 4. He's right now over Kessle code 6522.  I don't know what they've done with them.  Leaving 239 and be sending them to 19. Do you see him out there?  Okay. Okay. Just give him a frequency to talk to him. There's aircraft that's search and rescue and then control.	TSU TSU, VRM RTA, TSU, COA, VRM
1811 1812 1813	Major N: Speaker: Major N:	an escort over there. Call sign is November 4. He's right now over Kessle code 6522.  I don't know what they've done with them.  Leaving 239 and be sending them to 19. Do you see him out there?  Okay. Okay. Just give him a frequency to talk to him. There's aircraft that's search and rescue and then control. Send them out south of Long Island.	TSU TSU, VRM RTA, TSU, COA, VRM ITK2 TSU
1811 1812 1813 1814 1815	Major N: Speaker: Major N: Speaker:	an escort over there. Call sign is November 4. He's right now over Kessle code 6522.  I don't know what they've done with them.  Leaving 239 and be sending them to 19. Do you see him out there?  Okay. Okay. Just give him a frequency to talk to him. There's aircraft that's search and rescue and then control. Send them out south of Long Island.  To Washington?  They don't have launch authority at this time. What we need to do – they just want	TSU TSU, VRM RTA, TSU, COA, VRM ITK2 TSU TSU, ITK2

		I	
1818	Speaker:	I have radar contact with Quit 26 altitude presently?	ITK2
1819	Major N:	Unknown.	ITK2
1820	Speaker:	Unknown on the altitude. Roger that. I show them about 10 miles northwest of  Can I have them come up on our frequency?	TSU, RTA
1821	Major N:	Give me the frequency?	ITK2
1822	Speaker:	Uniform frequency Speaker 195.6 please.	ITK2
1823	Major N:	Speaker 195.6 Roger. Foxxy –	ITK2
1824	Speaker 1:	And Atlantic City's got two more aircrafts uploaded with offensive capabilities got two pilots standing by and want to know what you want to do with them?	
1825	Major N:	Have them suit up. Is that?	RTA
1826	Speaker 1:	I don't know it is.	MISC
1827	Speaker:	No, it's J. H He's one of the pilots.	MISC
1828	Major N:	Hey, how you doing. This is Nasty. Why don't we just suit you guys up? We're gonna see where we're gonna put you.	
1829	Speaker 19:	Okay. Tell them the airplanes are not heading that they're gonna start, and before they shut down does he want to have them shut down or launch.	
1830	Speaker 1:	We're contacting the commander now.	MISC
1831	Speaker 19:	Okay.	MISC
1832	Major N:	As soon as I get word from the commander I'll let you know.	MISC
1833	Speaker 19:	Okay. Thank you.	MISC
1834	Major N:	Just stay on the line please, sir. If you would please. And what do you have uploaded anyway? Sir?	
1835	Speaker 19:	yes.	MISC
1836	Major N:	This is a MCC. What do you got uploaded on those guys?	ITK2
1837	Speaker 19:	I believe it's only HEI right now. That's it.	ITK2
1838	Major N:	Okay. And what's your call signs?	ITK2
1839	Speaker 19:	I don't have call signs right now.	ITK2
1840	Major N:	You don't have call signs.	ITK2
1841	Speaker 19:	I can put up call signs, a local one if you like or if you would like to give me one. It 's up to you.	
1842	Major N:	Well, we had snakes originally.	TNSA

1843	Speaker 19:	We had Snake 11 and 12 and then we were given Elkin from somebody else.	TNSA
1844	Major N:	Sir.	MISC
1845	Major N:	The commander wants you to keep them on standby on the ground right now.	COA
1846	Speaker 19:	Run them, shut them down, and stay on alert with them.	RTA
1847	Major N:	Stay on alert with them and –	NC
1848	Speaker 19:	Do you have a call sign for me or will they give us that if we –	ITK2
1849	Major N:	I can give it to you. I can tell you what VPSL is for today.	ITK2
1850	Speaker 19:	Okay. I have that. That's Elkin.	ITK2
1851	Major N:	You have that.	MISC
1852	Speaker 19:	Yes, thank you.	MISC
1853	Major N:	Good.	MISC
1854	Speaker 13:	They are requesting our support to keep an eye on the cruise ship	SUK
1855	Speaker 1:	How we gonna keep an eye on a cruise ship?	ITK2
1856	Major N:	What do you want to do?	ITK2
1857	Sergeant B:	Speaker 195.6 and that one's from Washington.	VRM
1858	Major N:	Right here. Are you still online.	VRM
1859	Speaker 13:	Right now I have	NC
1860	Major N:	Right here.	VRM
1861	Speaker 13:	Until you tell me otherwise.	MISC
1862	Major N:	Just keep – I'm thinking just keep there with all this fruit – froggy stuff going on.	VRM
1863	Speaker 13:	I'm not gonna make all the calls. I'm just relaying information.	MISC
1864	Major N:	You know what keep them in the area. Wait till the coasties are out there, and we'll see what's up. It's too froggy right now. That could b a target as well.	
1865	Speaker 13:	I'm letting you make all the calls. I'm just relaying information.	MISC
1866	Major N:	I'll be the one going to jail. Hey, what the hell? I'll take you out, Bubba. Okay. You are on orders. I don't care. It's authorized. I authorized a bunch of people.	
1867	Sergeant B:	Okay. What's up?	MISC

1868	Major N:	I got to find more about – quit 26, 27. We got –	TMM2
1869	Speaker:	Can you tell me what's going on with quit 26 please.	ITK2
1870	Major N:	Yeah, they're going to the southeast sector. They're going to Oak Grove. They're not gonna be up north.	
1871	Speaker:	Quit 26 is he gonna intercept up there before?	ITK2
1872	Major N:	I don't understand what you just said.	MISC
1873	Speaker:	Okay. I need to speak to somebody. I need an escort here for priority aircraft coming into a national airport.	
1874	Sergeant B:	If you need me let me know. I'm kind of hanging around wondering what to do.	MISC
1875	Major N:	Go for it. Go. I just got called by Cleveland Center. They can't get a hold of the Site tech at 56. They don't know where he is. They don't know the status of the site. Real world.	SUK
1876	Speaker 1:	Real world?	ITK2
1877	Major N:	Of course, everything's real world, but I mean yeah, the site tech at Cleveland said he doesn't know where his guy is at Cleveland	
1878	Speaker 1:	Well, Cleveland Center is evacuated so far or they're getting ready to evacuate.	SUK
1879	Major N:	Okay. Well, this is the site. This is the site in Dansville, New York.	TSU
1880	Speaker 1:	Calling to say I can't get a hold of Cleveland?	TSU
1881	Major N:	No, it was Cleveland calling to say he couldn't get a hold of Dansville. Well, he said that he's gonna send somebody out to the and they're gonna find out what's going on with it.	
1882	Speaker 1:	Okay. Go with it. But their intention is to man the site 24 hours and they need to get a hold of somebody.	
1883	Major N:	And tell them to watch his butt out there.	MISC
1884	Female Speakers:	Now, we got two tracks on him.	SUK, VRM
1885	Major N:	If we can't find out who it is from scanner. We'll just make them unknown. What? What? What's that?	

1886	Speaker 1:	Nimble FD6 is gonna split right over New York City. I think it's one of those fighters.	SUK, VRM
1887	Major N:	Head it up, Tommy. Tell them all, Tommy. Let Nora sort it out. I've already asked him twice. Yep. He's unknown.	
1888	Speaker:	Why aren't they talking to the –	ITK2
1889	Major N:	Unknown at 1539.	ITK2
1890	Female Speakers:	Yep.	MISC
1891	Major N:	I mean they could have done that. Bravo 007.	ITK2
1892	Female Speakers:	Bravo 007 is heading 126 speed 051 no altitude.	ITK2
1893	Major N:	Forward tail it.	IKT2
1894	Speaker:	We're heading over Long Island, and I lost data on him.	TSU
1895	Major N:	Copy. Get rid of that correlation one.	RTA
1896	Speaker 13:	They turned the other way. I do know that.	TSU
1897	Major N:	Yeah. I need to report a payment to deaf com 3 once we're done too.	TSU
1898	Speaker 1:	All I know the for World Trade Center.	TSU
1899	Major N:	You need to wait for the units then or – okay. I need to find out about Atlantic. Are they out there over NCA.	
1900	Sergeant B:	You got Pittsburgh?	ITK2
1901	Major N:	I'm sure they are. Hey, Joe deaf com 3. We need to German OTIS at Langley.	
1902	Speaker 1:		ITK2
1903	Major N:	Yeah, right now.	MISC
1904	Sergeant B:	If they reach him just tell them to get us on guard or anything.	RTA
1905	Speaker 1:	They're not hitting at	TSU
1906	Major N:	Okay. It could just be tread, then just drop it.	RTA
1907	Speaker 1:	Drop it.	ITK2
1908	Major N:	The fucking World Trade Center just collapsed.	SUK
1909	Sergeant B:	Yeah, I just saw it on the news. What happened at the Pentagon?	ITK2
1910	Major N:	A small plane crashed in to their heliport right next to	ITK2

1911	Sergeant B:	Gees.	MISC
	Major N:	I don't know yet. No, I don't know.	ITK2
	Speaker 1:	We're showing up with flex intercept. We took all the information.	TSU
1914	Major N:	We need to chase an attainment time for deaf com 3.	RTA
1915	Speaker 1:	Manning at the radar site. I think all the sections have all reported in, but –	SUK
1916	Tim:	But them.	NC
1917	Major N:	Do we have a defcon for Langley and OTIS?	ITK2
1918	Speaker 1:	Just cut off all our fingers.	MISC
1919	Major N:	No shit.	MISC
1920	Sergeant B:	All right. Here's what's happening out west? 072 is gonna refuel with Saber. Thing 11 is already refueled and back out.	
1921	Major N:	Okay. We got the guy in Washington.	VRM, TSU
1922	Sergeant B:	071 –	NC
1923	Speaker 1:	I'm just swiping for him. It's hard to read the code. 3412 or 5412.	TSU, VRM
1924	<i>Foxxy:</i>	Are you talking about the Attorney General?	ITK2
1925	Female Speakers6:	How about those fighters in the Washington DC area.	ITK2
1926	Foxxy:	Okay. I'm gonna put you on with my MCC. He's looking for the fighter in the DC area, sir.	TSU
1927	Major N:	Okay. Who is this.	MISC
1928	Female Speakers6:	Vic Badge Washington Tower.	MISC
1929	Major N:	Okay. You're talking about the two guys out of Andrews?	ITK2
1930	Female Speakers6:	Well, on the things we have in the air right now in the Washington DC airspace, we working at the approach.	
1931	Female Speakers6:	Do you want us to keep working them or do you want to take over control of the airspace?	
1932	Major N:	Let me put you over to the – have you talked to the Senior Director yet.	ITK2
1933	Female Speakers6:	No, this is my first call.	ITK2

1934	Major N:	Okay. You can push them over to – just a minute. I'll push you over to the frequency. Standby.	
1935	Female Speakers6:	All right.	MISC
1936	Major N:	Whoa. Step over. Mike. Julian. Okay. Smurf has the DC area?	ITK2
1937	Major N:	Okay. I got the guy on radar at Washington right now.	VRM, TSU
1938	Female Speakers6:	Hello.	MISC
1939	Major N:	Yeah, I'm still here right. And you want a frequency of who to push these aircrafts to or do you want to –	
1940	Female Speakers6:	No, we want to know what to do. Do you want us to keep control? Do you want to have control? Andrews was talking about parole advisors coming in and out, and they want to know what to do with them	TNSA
1941	Major N:	do you want to fly them	TNSA
1942	Female Speakers6:	I just want to make sure we have one person or do you want to have two in control or what you want to do with these guys.	
1943	Major N:	Okay. Right now I got two people split in that area right now.	TNSA
1944	Speaker 1:	So I need to know the call signs.	ITK2
1945	Major N:	Do you know the call signs of those areas.	ITK2
1946	Female Speakers6:	All right. Let me put it this way, we own 23, 000 and below over the Washington DC airspace.	
1947	Speaker 1:	That's what he's talking about I don't know who it is.	MISC
1948	Major N:	I've already got. I've got plan in my hands. Bring them back.	TSU, COA
1949	Speaker 1:	Bring them back to where.	ITK2
1950	Major N:	What's the phone numbers to you guys? So these guys from Center can kind of talk to you better.	
1951	Female Speakers6:	We're getting the call signs now.	TSU
1952	Major N:	Hey, sir.	MISC
1953	Female Speakers6:	Yes, sir. Here we got fighters if you'd like them.	KI

1954	Major N:	What's – got the fighters –	KI
1955	Female Speakers6:	We got Wild 1.	KI
1956	Major N:	Wild 1.	KI
1957	Female Speakers6:	Caps 1.	KI
1958	Major N:	Caps 1.	KI
1959	Female Speakers6:	Caps 2.	KI
	Major N:	Caps 2.	KI
1961	Female Speakers6:	We have three Quit flights, 25, 26, and 27 and we have a tanker team 23 in the area.	KI
1962	Major N:	Okay. We're all talking to those aircrafts right now.	KI
1963	Female Speakers6:	Okay. I guess we're getting conflict instructions.	UR
1964	Female Speakers6:	We're having a civilian aircraft come in and out. We're telling them about helicopters around the Pentagon et cetera. Do you want us to keep doing that?	-
1965	Major N:	Keep doing that. Anything that looks suspicious or anything that doesn't look right, keep contacting our guys.	
1966	Female Speakers6:	Hi. Hold on one second. Don't go away please.	MISC
1967	Major N:	Okay. See what the problem is the huntress wants to see what we're doing right now. See if that's a problem with those guys.	
1968	Female Speakers6:	Cap – Wild just coordinated that you guys are gonna own 10 and above and we're gonna own 10 and – or below 10 and keep the fighters on our frequency.	
1969	Female Speakers6:	Do you copy that?	ITK2
1970	Major N:	Okay. That's a good copy.	ITK2
1971	Female Speakers6:	All right. Now, when we have to coordinate somebody that wants to go higher than 10, how can we reach you on this line or should we relay through the fighters?	
1972	Major N:	Relay through the fighters.	ITK2
1973	Female Speakers6:	All right. Let me give you my phone number	MISC
1974	Major N:	Say again?	MISC

1975	Female Speakers6:	Let me give you my number?	MISC
1976	Female Speakers6:	703-413-1541 hit 1 as soon as the recording thing starts.	MISC
1977	Major N:	10-4.	MISC
1978	Female Speakers6:	If you have any questions call me back at this number.	MISC
1979	Major N:	Okay. Give me that – 703?	MISC
1980	Female Speakers6:	413-1541 and hit 1 as soon as the recording starts. And we're gonna have below 10,000, and you're gonna own above 10,000.	
1981	Female Speakers6:	Is that the plan?	ITK2
1982	Major N:	Okay. You got 10 and below.	UR
1983	Female Speakers6:	10 and below we have and you have about 10, say 11 and above.	UR
1984	Major N:	Okay. And this is Washington Approach.	ITK2
1985	Female Speakers6:	Washington Approach. And we're gonna keep – you want us to keep the fighters on our frequency?	
1986	Major N:	Yep.	ITK2
1987	Female Speakers6:	All right. We'll do that.	MISC
1988	Major N:	You got better eyes there for us.	MISC
	Female Speakers6:	All right, sir.	MISC
1990	Major N:	Okay. Excuse me. Yeah.	MISC
1991	Female Speakers:	You need to take a break. If you don't take a break you're gonna burn out, and you're gonna be here for a while.	
1992	Major N:	Think I'm gonna be here for a while? Think we're gonna be here for a while?	TSU
1993	Speaker 1:	Yes, sir. Can I help you?	MISC
1994	Speaker:	Hello, I'm looking for Colonel M.	MISC
1995	Speaker 1:	Let me transfer you to 3. Hold on.	MISC
1996	Speaker 13:	Seriously you need to take a break. Just get out of here and blow up.	MISC
1997	Major N:	I'm just gonna sit back. I'm gonna make sure everything's –	MISC
1998	Female Speakers:	Why don't you both take a break. We'll get somebody else in here.	MISC
1999	Major N:	MCC Go.	MISC

2000	Colonel P:	This is Colonel P, Headquarters.	MISC
2001	Major N:	Yeah, let me put you on speaker here, okay? Can you hear us.	MISC
2002	Colonel P:	Yes, sir.	MISC
2003	Major N:	All right. Go ahead.	MISC
2004	Colonel P:	We're kind of worried about flying an airplane out and getting approval from the FAA to do that. Can you guys fly an airplane from Syracuse haul some cargo down. We got to go to Schenectady to Syracuse to Stewart.	
2005	Major N:	Okay. Syracuse connected down to Stewart.	ITK2
2006	Colonel P:	No, no, Schenectady, Syracuse to Stewart and then probably back to Schenectady.	ITK2
2007	Major N:	Okay. That should be no – have you contacted – do you need escort or do you need –	
2008	Colonel P:	We just know if we're gonna be able to fly.	ITK2
2009	Speaker 1:	Who is this?	ITK2, VRM
2010	Major N:	This is military aircraft; correct?	ITK2, VRM
2011	Colonel P:	C130.	ITK2
2012	Major N:	C130.	ITK2
2013	Colonel P::	To support this to that.	TSU
2014	Major N:	I don't see any problem with you flying, sir.	TSU
2015	Colonel P:	Okay. So just follow the normal flight plan.	TNSA
2016	Major N:	Just follow normal flight plan. Just say it's for this and you can have – let's see.	TNSA
2017	Colonel P:	Do you have any specific calls signs — you're using according to this exercise that will give airplanes some priority of something or whatever?	
2018	Major N:	No, we're not. Let's see – you're – it's a C130 out of Schenectady; correct?	ITK2
2019	Colonel P:	Follow the flight planes.	TNSA
2020	Major N:	Okay. Standby We'll get you a call sign. Hey, what's a call sign for Schenectady?	ITK2
2021	Speaker 1:	VCSL.	ITK2
2022	Colonel P:	We'll launch to Schenectady; right?	TNSA

2023	Major N:	Sir, we're trying to get you a good call sign, so we'll know who it is. I would say follow normal flight plan in coordination with FAA, but sir, be advised we got Boston is gone. We have evacuated. We got Cleveland is	
0004	0 1 1 0	evacuating at this time as well.	ITI (0
	Colonel P:	<u> </u>	ITK2
	Major N:	Yeah, the FAA centers.	ITK2
2026	Colonel P:	That's fine. We know we're not gonna get much from the FAA. We just want to be sure that when we – that an airplane that launches here has some priority. They can VFR if they have to.	
2027	Major N:	Yeah. That's no problem. You now what just make sure it's – you have mode 4 capability on the jets and mode 2?	
2028	Colonel P:	Yeah, go ahead and tell us the codes.	ITK2
2029	Major N:	Well, your mode 2 make sure that's for standard, your squadron standard.	RTA
2030	Colonel P:	Okay.	MISC
2031	Major N:	And also make sure your mode 4 is all loaded up as well.	RTA
2032	Colonel P:	Okay. With the everyday codes?	ITK2
2033	Major N:	With everyday codes. Yes, sir.	ITK2
2034	Colonel P	All right and you're gonna give us a call sign or –	ITK2
2035	Major N:	Standby. Any call signs?	ITK2
2036	Speaker 1:	We're looking it up.	ITK2
2037	Major N:	We're looking it up right now, sir. You know what, sir, we can't get it right now. You know what I'm gonna give you? I'm gonna give you call sign – gees what's a good call sign for you guys?	
2038	Colonel P:	Skier is they're normal is their normal call sign.	ITK2
2039	Major N:	What's the normal call sign?	ITK2
2040	Colonel P:	Skier.	ITK2
2041	Major N:	Peter?	ITK2
2042	Colonel P:	Skier, S-k-i-e-r.	ITK2
2043	Major N:	Skiter that sounds good to me. Skiter, skiter 01 Okay?	ITK2
2044	Colonel P:	Skier, you know the ski birds.	ITK2

2045	Major N:	Okay. I got a lot of people talking at me right now, sir. So sorry.	MISC
2046	Colonel P:	Skier 01.	ITK2
2047	Major N:	Okay. Skier 01, we got it.	ITK2
2048	Colonel P:	Thank you. Hold on. Let Colonel M that we're doing this please.	RTA
2049	Major N:	Okay. C130 out of Schenectady –	IMM
2050	Colonel P:	It's Schenectady, Syracuse, Stewart, okay? Hello.	UR
2051	Major N:	Yeah, I'm still here. I'm writing this down, sir.	MISC
2052	Colonel P:	Let Mar know that and we're having a tough time getting a hold of you guys. Can you call us back here in about a half hour?	
2053	Major N:	I'll try. We're having problems with our phone lines as well.	MISC
2054	Colonel P:	We're at 48 DSN 489-4320.	MISC
2055	Major N:	489- what was that again?	MISC
2056	Colonel P:	4320	MISC
2057	Major N:	4320	MISC
2058	Colonel P:	Thank you.	MISC
2059	Major N:	And this is Colonel P; right?	MISC
2060	Colonel P:	P.	MISC
2061	Major N:	Okay. Now, we're working for the State. Okay. Who am I talking to? Iceland. Iceland, I just got a call from Colonel P. She's involved in this now. Oh my God. Okay. They want to fly a C130 from Schenectady to Syracuse to Stewart. The call signs gonna be Skier like the downhill skier 01. His DSN is 489er 4320. 4320. Yeah, this is in support of what's been going on. Schenectady to Syracuse to Stewart. I think they're gathering up the staff. It's a C130. If he wants to prove I said go for it sir. I gave him a heads up though. No Boston, no Cleveland out there. He said we can fly VFI, and I said press. That's all I can do. I might be able to have a flight follow you, but go with it. Well, I told him to contact us, and I said make sure your modes and codes are all up time, daily, so I know who you are. So okay. Bye	TSU
2062	Sergeant B:	You want to do me a favor.	MISC
	•	•	

2063	Major N:	That's just north of Washington.	VRM, TSU
2064	Sergeant B:	Just north of the NCA?	ITK2
2065	Major N:	Yeah, I think so. It's actually in Virginia. Why? Go.	ITK2
2066	Speaker:		NC
2067	Major N:	Where?	ITK2
2068	Speaker 1:	Right there. Bravo 011 you guys there.	VRM
2069	Major N:	Okay. I need fighters.	IMM
2070	Speaker 1:	140 and 107 are gonna take their breaks.	SUK
2071	Major N:	For who weapons?	ITK2
2072	Sergeant B:	To contact us you mean?	ITK2
2073	Speaker 1:	No, for weapons contact them.	ITK2
2074	Major N:	I don't know. 1417 vector. You want to check that.	RTA
2075	Speaker:	Сору.	MISC
2076	Female Speakers:	What? I know.	MISC
2077	Female Speakers:	He might have somebody – he wonder if somebody borrowed it.	NC
2078	Major N:	Probably.	MISC
2079	Female Speakers:	Gonna hold tight right now. We have an aircraft coming down through Boston and –	KT
2080	Major N:	Okay. Got it.	VRM
2081	Female Speakers:	We got calls into them. We're flying civilian.	KT
2082	Major N:	Foxxy. Foxxy, FAA is reporting something directly over Martha's Vineyard, an unidentified Got an unknown over Martha's Vineyard. FA is reporting that, but – and interceptors are on it. I don't see anything, do you? Oh, they said it was over Martha's Vineyard.	VRM
2083	Major N:	The DV has landed the Attorney General has landed. Okay. That Bravo 545; right?	SUK, ITK2
2084	Tim:	Yep.	ITK2
2085	Major N:	Whereabouts? DC?	ITK2
2086	Tim:	DC.	ITK2
2087	Major N:	They turned off all the God damn lines to the outside.	SUK
2088	Speaker:	Who did?	ITK2
	Major N:	No local, so you can't make an outside phone call.	ITK2

2000	Female	Nope, I'm thinking.	MISC
2090	Speakers:	Nope, i'ii tillikilig.	IVIIOC
2091	Major N:	Who's that?	MISC
2092	Speaker 1:	OTIS says they're – don't push them.	MISC
2093	Major N:	Good. MCC, Go.	MISC
2094	Lt. Colonel C:	This is Lieutenant Colonel C the Footrope DL.	MISC
2095	Lt. Colonel C:	Just wanted to touch base with you to find out – I know you're working with Sergeant D. Mar or you're people are working with Sergeant D Mar. I just want to find out if you know what you're gonna need from us and for how long?	TNSA
2096	Major N:	Unknown right now, sir. You might want to call up the battle cab.	ITK2, TNSA
2097	Lt. Colonel C:	Okay. Give the number.	MISC
2098	Major N:	And talk to Colonel M. It's 6403.	MISC
2099	Lt. Colonel C:	6403?	MISC
2100	Major N:	Extension 6403.	MISC
2101	Lt. Colonel C:	And Colonel who?	MISC
2102	Major N:	Colonel M, he's the commander.	MISC
2103	Lt. Colonel C:	Okay. I'll do that.	MISC
2104	Major N:	Okay. Out.	MISC
2105	Lt. Colonel C:	Out.	MISC
2106	Sergeant B:	We've got Skier 01 as a call sign.	TSU
2107	Speaker 1:	He's on the line now.	MISC
2108	Sergeant B:	A call sign will be Skier, but probably a different number. Okay. Just so you know because they're used to using the first and last number of the tail number and all that stuff.	
2109	Colonel P:	Okay. I will do that.	TSU
2110	Sergeant B:	Okay. So when you hear Skier that's them. And it maybe be up to three airplanes.	KT
2111	Speaker 1:	Up to three aircrafts.	ITK2
2112	Sergeant B:	Yeah, maybe I think they can only get two of those HUMVs on an airplane, but we'll no better later.	
2113	Major N:	Are you ultimately sending them down to New York City?	ITK2
	Colonel P:	No, we're gonna send them to Stewart where they're gonna stage.	
2115	Major N:	Stage out.	ITK2

2116	Colonel P:	And then they'll probably go on their own down to New York City.	TSU
2117	Colonel P:	Ultimately the HUMVs are ultimately for use in New York City.	TSU
2118	Major N:	It's a possibility of the Skier flight of being a three ship?	ITK2
2119	Colonel P:	Yes, it's very good possibility.	ITK2
2120	Major N:	Do you have any codes or are you gonna say squawking 1200?	ITK2
2121	Colonel P:	We're gonna squawk 1200 on that and fly our normal flight plan. If you want the number for the command post in the 109.	
2122	Major N:	Could –	MISC
2123	Colonel P:	I can give it to you.	MISC
2124	Major N:	You know what, sir. Could you have them call me here with the codes. Actually call over to my ID section. Standby I'll get you a number.	RTA
2125	Colonel P:	You guys are hard to get to by the way.	TSU
2126	Major N:	6369	MISC
2127	Speaker 1:	It's one of those days, sir.	MISC
2128	Colonel P:	I know.	MISC
2129	Major N:	6368 or 69.	MISC
2130	Colonel P:	Yeah, start from the beginning now. This VSN.	MISC
2131	Major N:	VSN, yes, sir. 587-6368 or 69.	MISC
2132	Colonel P:	What are they gonna give you again.	ITK2
2133	Major N:	Well, they – just give them the codes that your command post.	RTA
2134	Colonel P:	Command post codes. I'm not a flier so I'm not –	TSU
2135	Major N:	Well, hopefully the tower there will have codes to give my ID section.	TSU
2136	Colonel P:	Okay. Just in Mode 4 codes.	TSU
2137	Major N:	That way we can track you guys. No.	TSU
2138	Colonel P:	Mode 2 codes?	ITK2
2139	Major N:	Mode 3 codes.	ITK2
2140	Colonel P:	Mode 3 codes. Okay. Will do.	ITK2
2141	Major N:	Your pilots – make sure that your pilots load up your mode 2 and mode 4 –	RTA
2142	Colonel P:	We told them to load mode 2 and mode 4s.squadron standard 2 and wartime codes in 4.	
	•	•	

2143	Colonel P:	Okay. And they'll call you with the Mode 3 numbers.	TSU
2144	Colonel P:	Bye.	MISC
2145	Major N:	Oh, I'm sorry. Just got off the phone with P.	MISC
2146	Female Speakers:	Uh-huh.	MISC
2147	Major N:	They're gonna have a three ship coming out of Schenectady going to Syracuse going to Stewart, and then probably gonna stage this as a team. Emergency action team. Thanks. I got them squawking mode 2, mode 4, and we're gonna get the mode 3 codes on the ships, possibly 3 ships. They're taking the HUMVs.	
2148	Female Speakers:	Are you sending anybody home yet.	ITK2
2149	Major N:	They're rotating out. They're refueling and rotating them. Why don't you start thinking about cap plan. I'm gonna get with the two SDs, start thinking about cap management. Make sure ID knows all the information.	
2150	Speaker 13:	Too far from take off because of the mode 3s.	TSU
2151	Major N:	Okay. How you doing, sir?	MISC
	Speaker 10 #00:	Great day today, huh?	MISC
2153	Major N:	No kidding.	MISC
	Speaker 10 #00:	Got, Foxxy, working on a Cap plan?	ITK2
2155	Major N:	Yeah, then I'm looking at it. They started the recall roster. They couldn't get a hold of you. They couldn't get a hold of you. They tried. I'm telling you. Okay. Yeah, we got another 1200 squawker west of New York headed towards it.	KT
2156	Sergeant B:	It was fine.	MISC
	Major N	Track number?	ITK2
2158	Sergeant B:	Because we relieved each other and that was fine.	MISC
2159	Major N:	another track west of it headed in the opposite direction. Yeah. Track Bravo 060.	
2160	Sergeant B:	told me he tried. So	MISC

2161	Speaker:	On a code of 2355 310 Century 40 E3.	TSU
2162	Speaker:	And he's just out there flying too. Just let the snakes know where he's at.	RTA
2163	Major N:	Copy we got him. Hey, Eldy.	VRM
2164	Major N:	Eldy.	MISC
2165	Speaker 10 #00:	Canada.	NC
2166	Major N:		NC
2167	Sergeant B:	Did he give you mode 3. 2355 and 240. How you doing?	ITK2
2168	Major N:	Hey, it's Mike. Can you pass along to commander and DO and FO that I'm working – we're working the cap management plan right for everybody. We're starting to cycle folks out. We're starting to think of who to replace, who to move along. Okay.	
2169	Speaker 1:	Two wanting to leave out of Pittsburgh. They want somebody to come get them at Pittsburgh.	
2170	Sergeant B:	Have they closed the airbase down? I don't know. All right. You're relieving Paul?	ITK2
2171	Sergeant B:	Or are you just plugging and checking things out? You want to sit here, just kind of answer the phones and shit.	
2172	Major N:	Chicago.	TMM2
2173	Speaker 1:	Chicago.	TMM2
2174	Major N:	Detroit. Fuck. We got the Skier, possibly three, they're picking up the HUMVs picking up that. Okay. What are you looking for? What's that? Right there. ID him. If it looks freaky, ID it? I'm giving you the authority to do that. Nope. Okay.	VRM, RTA
2175	Speaker:	There's nothing down there. The big thing is monitoring	TSU
2176	Major N:	Then –	NC
2177	Speaker 1:	Except for the top right here. Captain N dealing without a tanker. Anybody comes over those other ones. Find out who it is first, find out who has it and then push them to that frequency.	KT
2178	Speaker 1:	Other than phones are just ringing constantly we're dealing with all the questions. Okay.	

2179	Major N:	Fighters are going down Hey, Warren, want to throw that into chat for these guys?	TSU, RTA
2180	Speaker 1:	You got all units up flying?	ITK2
2181	Sergeant B:	Yes, we got Toledo as far as F15s, we have — Toledo, Atlantic City, Syracuse has been scrambled. Langley's been scrambled. F15s we have Langley scrambled. OTIS scrambled. We have Washington —	
2182	Major N:	Can you pull up a tail and see who this guy is?	RTA, VRM
2183	Sergeant B:	<ul> <li>airborne. Tankers are everywhere. We stop doing the tankers from here. Somebody else took over the tanker</li> </ul>	
2184	Major N:	Let's see what we get out of here and if not, then go.	RTA, TSU
2185	Sergeant B:	Mostly we have OTIS here around this area. We have Atlantic City, Baltimore, Washington. We have Langley, Baltimore, Washington. Toledo is out that direction. Set up a barrier here.	COA, VRM
2186	Major N:	They can do whatever they want; right?	ITK2
2187	Speaker 1:	They said that there was still a couple of aircrafts still supposedly not accounted for.	KT
2188	Sergeant P	This is weapons, Sergeant P on an unsecured line. How can I help you?	MISC
2189	Speaker 15:	This is the Senor Air Director at Military port.	MISC
2190	Speaker 15:	I'm on	NC
	Sergeant P:	I'm not familiar with the	NC
2192	Speaker 15:	It's cherry	NC
2193	Sergeant P:		MISC
2194	Speaker 15:	It's basically just trying to make sure that out area is and I'm trying to get ID, but I can't getting any crack on them. So I'm not able to detail them, and I'm just trying to make sure everything is	
2195	Sergeant P:	All right.	TSU
2196	Speaker 15:		NC
2197	Major N:	A little bit.	NC
2198	Speaker 15:	My question for you is are you familiar with the northeast and southeast of Ice?	ITK2
2199	Sergeant P:	Negative.	ITK2

2200	Speaker 15:	You know Whiskey 72 airspace?	ITK2
2201	Sergeant P:	Yes.	ITK2
2202	Speaker 15:	South of it by 20 miles it turns into the southeast.	TSU
2203	Sergeant P:	Okay.	TSU
2204	Speaker 15:	I think you might be in the in the southeast area.	TSU
2205	Sergeant P:	We are.	TSU
2206	Speaker 15:	Yep, it would be the southeast area of the sector. Is where you would deal with the aircraft. Anything like Whiskey 72 and above would be us.	
2207	Sergeant P:		NC
2208	Speaker 15:	Senior director. Standby. BGSN 523	MISC
2209	Sergeant P:	Okay.	MISC
2210	Speaker 15:	-5210	NC
2211	Sergeant P:	All right. Thank you very much.	MISC
	Speaker 15:	Thank you, sir. So our really concern is above the Washington, New York area. This areas capped and all the cities. Like we have none of them guys going up against OTIS coming in there. Nobody supposed to be airborne right now. The slammers and all that shit are coming up airborne. Call OTIS find out if they got anybody left that sending up and what kind of ETA to get them airborne if they are. There's nobody left. Okay.	ITK2
2213	Sergeant B:	Command post the soon as they can get anybody airborne is a tanker and Langley they're calling us saying we're airborne – just try to pass the time as best as you can. We were escorting the Attorney General into Washington a little while ago and apparently there's a two star that wants to be picked up in Pittsburgh.	TMM2
2214	Speaker 15:	Huntress weapons Sergeant P. Major is currently – hey, I just want to let you know that valid data on a pending that's coming in over water southeast 801.	
2215	1	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	MICC
	Female Speakers:	Yep.	MISC

2217	Female Speakers:	Bravo 0 – okay. Thanks.	NC
2218	Speaker 15:	76	NC
	Female Speakers:	Thanks. Okay. That's valid data on 076. We've got a mode 3 code. Okay. Yep. Good data on it.	
2220	<i>Foxxy:</i>	There's one more airborne out of L14 towards the Chicago area.	SUK
2221	Female Speakers:	He's got a mode 2 and a mode 3. 2776 mode 2. Where's my battle command – my and my C3.	
2222	Major N:	Okay. Got it done.	ITK2
2223	Tim:	You know the shadows up here in the north?	ITK2
2224	Speaker 15:	All right.	ITK2
2225	Tim:	At first it was just a shadow.	VRM
2226	Female Speakers:	Which are we heading there?	ITK2
2227	Tim:	Been on with the –	NC
2228	Female Speakers:	This is a good one down here. I'm trying to get a hold of the commander. I was saying no. Standby. Did we get anything on that tail number? So what does that mean. It means that our plan is –	FI
2229	Speaker 15:		NC
2230	Speaker 15:	Okay. We got another two ships taking off. Gus only.	SUK
2231	Female Speakers:	Uh-huh. There's weapons now?	ITK2
2232	Speaker 15:	Now right now, but when they hit jokers. The next –	ITK2
2233	Female Speakers:	Another wait.	NC
2234	Speaker 15:	Fable 11 is out there right now. Fable 21	SUK
2235	Female Speakers:	Okay. 21 will replace them?	ITK2
2236	Speaker 15:	Yes.	ITK2
2237	Female Speakers:	Okay. How we doing in the – okay. We got him as a friendly. Do we have any information as to where that Canada, Air Canada 57 and the Continental –	

2238	Speaker 15:	Out New York guys are prevailing helicopters in New York, blue and white marking possible medevac, but they can't confirm.		T
2239	Female Speakers:	Which one where is it?	ITK2	
2240	Speaker 15:	In New York.	ITK2	
2241	Female Speakers:	That's probably the guy that took off out of Bradley.	MS	
2242	Speaker 15:	Not the black hawk.	TSU	
2243	Female Speakers:	ls it squawking 1200? Is he squawking 1200?	ITK2	
2244	Speaker:	Yeah, these guys definitely.	ITK2	
2245	Female Speakers:	Cause we're expecting aircrafts squawking 1200 that will come off out of Bradley. Yeah, he's giving me – yeah. We don't now why he went in at all. Should I get them back? What's going on with the E3? I need – yeah, talk to Phil. He's been dealing with all the E3 stuff. Hello. Yes. I need to talk to the commander if he's there. Yes. Okay. I have QT 25 in trial of a low wing aircraft. He's squawking in mode 3 1200. We got a tail number on him. There's not flight information or anything, but he's pulling us farther and farther away of NCA the longer stay with him. Okay. Thanks.	ITK2, V	
2246	Speaker 15:	Know it off.	ITK2	
	Female Speakers:	Terminate, yeah. Wait. Who is it? We need to search That should be – we should be able to get Foxxy on that.	RTA, I	TK2,
2248	Speaker 15:	Who's that going through? Who's controlling it?	ITK2	
2249	Female Speakers:	FC MCC.	ITK2	
2250	Speaker 15:	IF we do –	NC	
2251	Speaker 15:	So how come we're asking if we can evacuate thearea. That's a problem. Maybe he was looking for actually Is that what he's looking for?	ITK2, IN	ИΜ
2252	Speaker 15:	Okay.	MISC	
2253	Female Speakers:	Which one? Which? Oh, right.	ITK2	
2254	Sergeant B:	I got it. I got it. Tell them.	VRM, I	ΓK2

2255	Female	Copy that.	MISC
	Speakers:		
2256	Sergeant B:	Control Sergeant B.	MISC
2257	Major D:	Hey, Sergeant B, this is Major D, how are you today?	MISC
2258	Sergeant B:	Good, sir.	MISC
2259	Major D:	Are you from the northeast defense sector?	ITK2
2260	Major D:	Okay. Here's a problem. I'm with the New Jersey Army National Guard.	TSU
2261	Major D:	And I have couple UH60s up. A UH1 and a UH60 up trying to police from Trenton area and area up to Newark.	
2262	Major D:	And we don't have the transponders squawking to set clearance to the area, so one of them just got put on the ground be a F16. not shot down, but told to land and don't take off again by an F16. So what I need is a transponder squawk so that these guys can interrogate us and let us know that we can clear through the area.	RTA
2263	Sergeant B:	All right. What are you in New York's airspace right now?	ITK2
2264	Major D:	No, we're in New Jersey's airspace.	ITK2
2265	Sergeant B:	New Jersey?	ITK2
2266	Major D:	Right. And they're State police on these aircrafts.	ITK2, TSU
2267	Sergeant B:	Okay. You got a lat./long. for your helicopter?	ITK2
2268	Major D:	Where it is right now?	ITK2
2269	Major D:	Fuck. Hey, we got a lat./long. for where the helicopter is? Hold on.	ITK2
2270	Sergeant B:	Put this lat./long. in when I give it to you. Call it a helo.	RTA
2271	Major D:	We have three operational up flying right now.	KT
2272	Sergeant B:	Right the other two are up and squawking though; right?	ITK2
2273	Major D:	We don't have a squawk that's the problem. We need to know the squawk we're supposed to be squawking in mode 4.	
2274	Sergeant B:	Okay. You guys are mode 4 capable?	ITK2
2275	Major D:	Yep.	ITK2

2276	Major D:	Those guys are two miles east of Princeton. We need a lat./long. sir.	VRM, RTA
2277	Major N:	They just got two ready, so if we need them we can call them. Okay. You guys have mode 2.	
2278	Sergeant B:	Are you squawking them?	ITK2
2279	Major D:	We don't know what the squawk is?	TSU
2280	Sergeant B:	I know, but for the mode 2 you guys have unit assigned; right?	ITK2
2281	Major D:	Mode 2.	ITK2
2282	Sergeant B:	Your unit is assigned mode 2.	ITK2
2283	Major D:	Yeah, but the problem is it's army code and they do changes.	KT
2284	Sergeant B:	Okay. Make sure they stay on their mode 2, they'll know they're military aircraft, but we need to ID them by mode 3. So I'll get you a mode 3, but I need the lat./long. position if you can get it.	
2285	Major D:	Hold on a second.	MISC
2286	Sergeant B:	Okay. It's too bad. It's New Jersey Army National Guard.	TSU
2287	Major D:	Two things have you got in contact with the F16 that put our aircraft on the ground.	ITK2
2288	Sergeant B:	Hold on I'll find out. Right. I told them to squawk mode 2 whatever they could put in it, and they'll know they're military and then I'll get them a mode 3. That's what I told them for now. Do they have the F16 on contacts that put him down on the ground? Okay. We're trying to get the F16.	TSU
2289	Major D:	Okay. Do you guys have a mode 4 cause I'm not –	ITK2
2290	Sergeant B:	No, mode 4 is electronic friendly. That's all that is.	ITK2, ITK2
2291	Major D:	Okay. How about a mode – you're talking about the four digit squawk.	ITK2, ITK2
2292	Sergeant B:	The four digit squawk is mode 3 or a mode 2. What you need is a mode 3 because a mode 2 isn't going to do it.	
2293	Major D:	That's right. I need a mode 3 squawk from you.	RTA
		you.	
2294	Sergeant B:	And we have the FAA representative trying to get you mode 3 right now as we speak.	TSU

2296	Sergeant B:	Okay. You will have four mode 3 codes for flight ship for helos.	TSU
2297	Major D:	Yeah.	MISC
2298	Sergeant B:	But if you in qualms with you helicopters, you got to make sure that they're mode 2s as well. That way they're not gonna shoot anybody down.	ŕ
2299	Major D:	All right. I can't seem – I'm gonna check on the mode 2s, but I can't guarantee them.	TNSA
2300	Sergeant B:	Well, whatever they can put in there. Doesn't even matter if they're right.	TNSA
2301	Major D:	Right. Just as long as they got something in mode 2.	TNSA
2302	Sergeant B:	Right.	TNSA
2303	Major D:	But again I can't guarantee it, but if you got a squawk for me, that'd be great.	TNSA
2304	Sergeant B:	All right. Standby. What? That century 40. 2355. if it's 2355 it's Century 40 E3. I think he's out a tanker.	
2305	Speaker:	Who is this?	MISC
2306	Speaker:	How can I help you sir?	MISC
2307	Sergeant B:	Did you guys ground an Army Helicopter?	ITK2
2308	Speaker:	No	ITK2
2309	Sergeant B:	In Jersey somewhere? All right.	ITK2
2310	Major N:	Jamie's on his way up to talk to the FO and see if – okay. Okay.	MISC
2311	Sergeant B:	What about – they grounded a helo full of state troopers.	KT
2312	Female Speakers:	Anybody get more word on Air Canada 57 or Continental	ITK2
2313	Speaker 13:	Continental is route back to Paris.	SUK
	Female Speakers:	So Continental's going back to Paris?	ITK2
2315	Sergeant B:	You're in the Jersey area too.	ITK2
	Female Speakers:	How do you know they went and did that? They called and said they were under distress. They may have told us they were going back to Paris. Continental whatever.	
2317	Sergeant B:	Nobody working the Jersey area?	ITK2
	Sergeant B:	Did you guys ground a helicopter with an F16.	ITK2
2319	Female Speakers:	Oh yeah, cause they know we won't see them.	VRM, TSU

2320	Sergeant B:	Did you ground a helicopter? No. An Army helicopter? No, it was New Jersey.	ITK2
2321	Major N:	Jamie.	MISC
2322	<i>Foxxy:</i>	He's up in the battle station.	MISC
2323	Sergeant B:	bullshit none of the have mode 3s.	TSU
2324	Female Speakers:	Mode 4 – who else is that on the phone? Nobody?	MISC
2325	Speaker:	Mode 2 is an identifier.	TSU
2326	Female Speakers:	I want to make sure the activity is really going down.	IMM
2327	Major N:	I need them on a line.	RTA
2328	Sergeant B:	Wait. Before you do that do you know who was controlling the F16 to put the helo on the ground in Jersey? In the Jersey area?	
2329	Speaker 15:	Maybe Atlantic City is going	NC
2330	Sergeant B:	Did you end up getting a lat//long. for that helo?	ITK2
2331	Major D:	What's that lat./long. guys? Hold on just a second.	ITK2
2332	Major D:	The aircraft is at Princeton. I need the lat./long. right now.	TSU, RTA
2333	Speaker:	Can't we give them codes?	ITK2
2334	Tim:	Okay. We've got 100,000 pounds available on Main.	SUK
2335	Female Speakers:	You now I mean.	MISC
2336	Foxxy:	Fighter 2 coming down.	SUK
2337	Major D:	You got that lat./long. for me?	ITK2

## LIST OF REFERENCES

- Beach, L. R. (1990). *Image Theory: Decision Making in Personal and Organizational Contexts*. West Sussex, England: John Wiley & Sons Ltd.
- Bellinger, G., Castro, D., Mills, A., (2004). Data, Information, Knowledge and Wisdom. <a href="http://www.systems-thinking.org/dikw/dikw.htm">http://www.systems-thinking.org/dikw/dikw.htm</a>. (accessed, June 2008)
- Beyerlein, M. M., Beyerlein, S. T., and Kennedy, F. A.. (2006). *Advances in Interdisciplinary Studies of Work Teams. Volume 12: Innovation Through Collaboration*. Oxford, England: Elsevier Ltd.
- Blumberg M. & Pringle C.D. (1982) The missing opportunity in organizational research: Some implications for a theory of work performance. Academy of Management Review, 7, 560-569.
- Bonner, B. L. (2004) Expertise in Group Problem Solving: Recognition, Social Comination and Performance. Group Dynamics: Theory, Research and Practice, 8(4), 277-290.
- Bronner, M. (2006). 9/11 Live: The NORAD Tapes. Vanity Fair (August 2006). <a href="http://www.vanityfair.com/politics/features/2006/08/norad200608">http://www.vanityfair.com/politics/features/2006/08/norad200608</a>. (accessed April 2008).
- Cacciabue, P.C. and Hollnagel, E. (1995). Simulation of Cognition: Applications, Expertise and Technology: Cognition and Human-Computer Cooperation. Hoc, J.M., Cacciabue, P.C. and Hollnagel, E. (Eds.). Lawrence Erlbaum Associates.
- Cohen, M.S., Freeman, J.T. and Thompson, B.T. (1998). Critical Thinking Skills in Tactical Decision Making: A Model and A Training Method. (Canon-Bowers, J. and E. Salas, eds.), *Decision-Making Under Stress: Implications for Training & Simulation*. Washington, DC: American Psychological Association Publications.
- Federation of American Scientists, NORAD Selected Chronology. <a href="http://www.fas.org/nuke/guide/usa/airdef/norad-chron.htm">http://www.fas.org/nuke/guide/usa/airdef/norad-chron.htm</a>, (accessed May 2008).
- Fiore, S. M. (2007). *Macrocognition Taxonomy Operational Definitions Draft* 1. Paper presented as part of Toward an Understanding of the Macro-Cognitive Processes in Complex Team Problem Solving: Submitted by Institute for Simulation and Training and Team Performance Laboratory, University of Central Florida: In Collaboration with and prepared for Office of Naval Research, Human Systems Department, Arlington, VA. 18 March 2007.

- Fiore, S. M., Rosen, M., Salas, E., Burke, S., & Jentsch, F. (2008). Processes in Complex Team Problem Solving: Parsing and Defining the Theoretical Problem Space. M. Letsky, N. Warner, S. M. Fiore, & C. Smith (Eds.). *Macrocognition in Teams*. London: Ashgate.
- Freeman, J, and Hess, K. P. (2003). Collaborative Critical Thinking. In Proceedings of the 8<sup>th</sup> International Command and Control Research & Technology Symposium. Washington, DC, June17-19, 2003.
- Garrity, M. 2007. Investigating Team Collaboration of the Fire Department of New York Using Transcripts From September 11, 2001. Master's Thesis, Naval Postgraduate School.
- Gibson, C. B. and Cohen, S. G. 2003. Virtual Teams that Work: Creating Conditions for Virtual Team Effectiveness. San Francisco: Jossey-Bass A Wiley Imprint.
- Godar, S. H. and Ferris, S. P. (2004). *Virtual and Collaborative Teams: Process, Technologies and Practice.* Hershey: Idea Group Publishing (and imprint of Idea Group Inc.).
- Gold, N. (2005). *Teamwork: Multi-Disciplinary Perspectives.* New York: Palgrave Macmillan.
- Hinsz, V.B. (1990). Cognitive and Consensus Processes in Group Recognition Memory Performance. Journal of Personality and Social Psychology, 59, 705-718.
- Hutchins, S. G., Bordetsky, A, Kendall, A and Bourakov, E. (2007). Empirical Assessment of a Model of Team Collaboration. In *Proceedings of the 12<sup>th</sup> International Command and Control Research & Technology Symposium.* Newport, RI, June 19-21, 2007.
- Hutchins, S. G., Kendall, A. (2008). Patterns of Team collaboration Employed to Solve Complex Problems. In Proceedings of the 52<sup>nd</sup> Annual Meeting of the Human actors and Ergonomics Society, New York, September 22-26. Santa Monica, CA.
- Hutchins, S. G., Kendall, A. (2008). Team Collaboration Used for Sensemaking to Solve Unique Problems. In Proceedings of the 8<sup>th</sup> Human Interaction with Complex Systems Conference. April 2-4, Norfolk, VA, North Carolina A&T State University, Greensboro, NC.
- Hutchins, S. G., Kendall, A., and Bordetsky, A. (2008). Understanding Patterns of Team Collaboration Employed to Solve Unique Problems. In *Proceedings of the 13<sup>th</sup> International Command and Control Research & Technology Symposium.* Bellevue, WA. June 1-18, 2008.

- Ilgen D. (1999) Teams embedded in organizations: Some implications. American Psychologists, 54, 129-139.
- Keller, G. (2005). Statistics for Management and Economics: Seventh Edition. United States: Thomas South-Western.
- Klein, G., Ross, K. G., Moon, B. M., Klein, D. E., & Hollnagel, E. (2003). Macrocognition. *IEEE Intelligent Systems*, 81–85.
- Lahti, R.K. (1996). Group Decision Making Within the Organization: Can Models Help? Center for the Study of Work Teams, University of North Texas.
- Laughlin, P. R. (1980). Social Comination Processes in Cooperative Problemsolving Groups on Verbal Intellective Tasks. In M. Fishbein (Ed.), Progress in Social Psychology (pp. 127-155). Hillsdale, NJ: Erlbaum.
- Letsky, M., Warner, N., Fiore, S.M., Rosen, M.A., & Salas, E. (2006).

  Macrocognition in Complex Team Problem Solving. In Proceedings of the 11<sup>th</sup> International Command and Control Research and Technology Symposium, June 2006.
- Mathews, G., Davies, R. D., Westerman S. J., and Stammers, R. B. (2000). Human Performance: Cognition, Stress and Individual Differences. Philadelphia: Taylor & Francis Group.
- McNeese, M., Salas, E., and Endsley, M. (2001). New Trends in Cooperative Activities: Understanding System Dynamics in Complex Environments. In Proceedings of the 45<sup>th</sup> AnnualHuman Factors and Ergonomics Society Meeting: Santa Monica, CA.
- Merriam-Webster, Cognition., http://www.merriamwebster.com/dictionary/cognition (accessed May, 2008)
- Merriam-Webster, Collaboration., http://www.merriamwebster.com/dictionary/collaboration (accessed June 2008)
- North American Aerospace Defense Command, About CONR. www.norad.mil/about/CONR.html, (accessed May, 2008).
- North American Aerospace Defense Command, About NORAD. www.norad.mil/about/index.html, (accessed May, 2008).
- ONR, Science & Technology Warfighter Performance: Human Performance Division. http://www.onr.navy.mil/sci\_tech/34/341/.
- Pauleen, D. J. (2004). *Virtual Teams: Projects, Protocols and Processes*. Hershey: Idea Group Publishing.

- Reed, S. K. (1973). *Psychological Processes in Pattern Recognition*. New York: Academic Press.
- Salas, E., and Fiore, S. M., (2004). Team Cognition: Understanding the Factors that Drive Process and Performance. Washington DC: American Psychological Association.
- Socias, L. (2008). Investigating Team Collaboration at the North East Air Defense Sector Using Transcripts of September 11, 2001. Master Thesis, Naval Postgraduate School.
- Straus, D. (2002). *How to Make Collaboration Work.* San Francisco: Berrett-Koehler Publishers Inc.
- Strickler, M. (2006). SEADS Ends Operations, becomes AOC. AFNORTH Public Affairs. http://www.1af.acc.af.mil/media/archive/story.asp?id=123032293.
- Strickler, M. SEADS Ends Operations, Becomes AOC. AFNORTH Public Affairs Release Number: 021106 (November, 2006). http://www.1af.acc.af.mil/media/archive/story.asp?id=123032293. (accessed June 2008).
- Sundstrom E. (1999). Supporting work team effectiveness: Best management practices for fostering high performance. San Francisco: Jossey-Bass.
- The National Commission on Terrorist Attacks Upon the United States. (2004).

  The 9/11 Commission Report. W. W. Norton & Company, New York. New York.
- Tuckman, B.W. (1965). Developmental Sequence in Small Groups. *Psychological Bulletin*, Volume 63, Number 6: 384-99.
- Warner, N. W. and Wroblewski, E. M. (2004). *The Cognitive Processes used in Team Collaboration during Asynchronous, Distributed Decision Making.*Naval Air Systems Command Human Systems Department, Patuxent River, Maryland.
- Warner, N. W., Letsky, M., and Cowen M. (2003). Structural Model of Team Collaboration. In Proceedings of the Human Factors and Ergonomics Society 47<sup>th</sup> Annual Meeting: Santa Monica, CA.
- Wikipedia, Cognition. <a href="http://en.wikipedia.org/wiki/Cognition">http://en.wikipedia.org/wiki/Cognition</a>, (accessed May, 2008).
- Wikipedia, Northeast Air Defense Sector.

  http://en.wikipedia.org/wiki/Northeast\_Air\_Defense\_Sector, (accessed May, 2008).

- Wikipedia, September 11, 2001 timeline for the day of the attacks. http://en.wikipedia.org/wiki/September\_11%2C\_2001\_timeline\_for\_the\_day\_of\_the\_attacks, (accessed May, 2008).
- Wood, D. J., & Gray, B. (1991). Toward a Comprehensive Theory of Collaboration. *Journal of Applied Behavioral Science* 27: 139-162.
- Zsambok, C. E. and Klein, G. 1997. *Naturalistic Decision Making*. New Jersey: Lawrence Erlbaum Associates, Inc.

THIS PAGE INTENTIONALLY LEFT BLANK

## **INITIAL DISTRIBUTION LIST**

- Defense Technical Information Center Fort Belvoir, VA
- Dudley Knox Library
   Naval Postgraduate School Monterey, CA
- Susan G. Hutchins
   Naval Postgraduate School Monterey, CA
- 4. Anthony Kendall
  Naval Postgraduate School
  Life Sciences Division
- 5. Dr. Mike Letsky
  Office of Naval Research
  Life Sciences Division
  Arlington, VA
- 6. Dr. Norm Warner White Haven, PA
- 7. Center for Hameland Defense and Security Naval Postgraduate School Montery, CA
- 8. Dr. Dan C. Boger Naval Postgraduate School Monterey, CA